THE CARE OF
INFANTS IN INDIA.

THE CARE OF INFANTS IN INDIA.

A Work for Mothers and Nurses

UPON

THE FEEDING AND REARING OF INFANTS

EDITED BY

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PREFACE.

THE excessive mortality among infants, both native and European, in India, especially during the first few years of life, has convinced the writer of the urgent need for a better knowledge concerning the management of babies in India. This waste of life, with all its attendant sufferings, is in a large measure to be traced to errors which arise from ignorance of the simplest hygienic rules of dietary and nursing.

The areas to be travelled over in India are often so great that it frequently happens that a young mother cannot immediately secure the attendance and advice of a medical man. It is in such cases that this work may prove a valuable aid to the Anglo-Indian mother, but it is not intended, nor must it be regarded, as a substitute for medical aid. Since so much ignorance prevails upon the subject of the management and feeding of young babies, we have endeavoured to answer in a simple form the following questions, which sooner or later must suggest themselves to every young mother:—

1. *What are the functions of an infant's food?*
2. *What are the ill effects produced by improper food?*
3. *What are the good results gained by rational feeding?*
4. *Variations to be introduced in cases of emergency.*
5. *The treatment of minor ailments.*
6. *The clothing of infants.*
7. *The hygiene of the nursery and the duties of the ayah.*

But few remarks have been made upon infantile diseases, as their treatment is quite outside the objects of this little work, and belongs to the duties of the medical practitioner. It is held by the writer of these pages that the custom of performing experiments with quackeries upon young children is most reprehensible.

We must acknowledge the valuable assistance which we have derived from Dr. Cheadle's "Artificial Feeding of Infants," Dr. Eustace Smith's "Wasting Disease of Children," and the works of Foster, Landois and Stirling, and Jane Walker.

For the illustrations in the earlier part of the book we are indebted to the publishers of Pilley's "Physiology."

To the grateful parents who have furnished us with the evidence which we have been able to employ in Part II. of this work we tender our most sincere thanks; nor are we less indebted to those hundreds of others who have given us the support of their testimony, but whose evidence we, from want of space, are unable to include. J. P.

January 1895.

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OF
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CHAPTER I.

INTRODUCTION.

Importance of Study of Hygiene of the Nursery.

THE rearing of healthy and vigorous children under the influence of a tropical climate is a question of the deepest interest to every mother in India, and our purpose will be to state those measures which should be adopted in order to secure the happiest and healthiest conditions during early life. The sickness and high rate of mortality among Anglo-Indian infants is in part to be accounted for by the absence of home surroundings and by the existence of an environment foreign to the parents. But in a large measure, also, many of the early deaths are essentially preventable, and are the result of carelessness and ignorance.

Young mothers at home are only too often entirely ignorant of the hygiene of the nursery and the simplest scientific facts about the feeding and care of infants; but, at the same time, as a rule, they have the advantage of experienced relations at hand to turn to for advice, and the ready aid of good nurses and skilful medical men.

In India, in spite of the increasing means of communication, a young mother at any isolated station is often at the mercy of an ayah, or ignorant servants. A wise mother will never be led by an ayah, no matter how reliable she may appear. The little life at stake is hers to preserve, and hers alone is the responsibility of informing herself of the conditions most favourable for the health of her child. The questions upon which a young mother should arm herself with knowledge embrace all those conditions which will determine the well-being of her baby; these include simple hygienic rules about food and drink, cleanliness, good water, clothing, and protection from the sun and night air.

The object of this little work is not to frighten mothers by stating the responsibilities and difficulties before them in India, but rather to enable them to cope with the situation with confidence, and to give such useful hints and advice as will buoy them up with a feeling of security, in periods of difficulty and danger.

Every mother has sooner or later forced upon her notice the question of the **selection of an artificial food** for her baby. It may be that during the earlier periods of maternity she can supply her child with food, but a time comes when a substitute for mother's milk must be found. In India the tendency and ability of mothers to suckle their babies seems to be decreasing, and it therefore, in many cases, becomes necessary for mothers to employ some artificial substitute for breast milk. In this matter a mother may sometimes be guided in the right direction by her own knowledge, or the advice of friends with greater experience; but very often young mothers in India are ignorant of those simple truths which should guide them in the feeding of their little ones. Those blind rule-of-thumb practices, which are only too frequently followed by the ayah in feeding young children, cost thousands of infants' lives annually. Vital statistics show, that of the children born alive, less than three-fourths survive to the age of five years. A large proportion of these early deaths are due to infantile diseases, such as whooping-cough and bronchitis; but a larger number may be traced to diarrhœa, dysentery, convulsions, and wasting diseases. This frightful mortality among infants, during the early years of life, is undoubtedly mainly due to errors in dietary and clothing; and the chief cause of this enormous amount of preventable disease and loss of life, with all its attendant pain and suffering, is to be found in the use of improper artificial foods.

When we take into consideration the number of sickly children who survive with enfeebled constitutions, and all the loss and misery which is involved, the importance of a wider knowledge of the means of prevention becomes at once apparent to all. This enormous sacrifice might be averted, these victims of disease saved, by improving sanitary conditions, judicious clothing, proper feeding, good medical treatment, and generally enlightened parental care. It is with the earnest endeavour to diminish this awful waste of human life and to reduce this enormous amount of preventable suffering, that the following pages have been written. For it is only with improved knowledge of the causes of the sickness and ill-health of babies, that young mothers may hope to avoid those causes which tend to rob them of their offspring.

It is obviously the **duty of every mother** to inform herself of the simplest facts of digestion and nutrition of babies, and the elements of nursery hygiene. The life and well-being of an infant are determined by wholesome food, good clothing, and proper sanitary conditions, and a mother should seek to gain knowledge of those simple hygienic laws which determine the life and health of her baby, a knowledge of which will often enable her to rear a strong, healthy, and vigorous child from even the weak and sickly; whilst ignorance of the same may lead to pain and suffering, and may endanger the life of her little one. The materials for the knowledge exist: they are the hitherto unrecorded experiences of many mothers and medical men who have spent years in India, and they are to be found scattered about in the pages of works on hygiene and physiology. For a young mother in India this information is practically inaccessible, and, as a rule, mothers are ignorant alike of the natural laws which govern the needs and powers of a baby, and of the exact nutritive value and suitability or otherwise of the various materials which are on the market and sold as artificial foods. In consequence, antiquated practices are followed, without a knowledge of the causes at work for or against the result wished for.

In the matter of artificial feeding the exact nutritive value of the food selected is not estimated. If one does not agree, another is substituted haphazard, not because the components are known to be in accordance with nature's requirements and the peculiar conditions of the baby, but because some other child, perhaps of a different age and constitution, appears to have done well on it. It is very common in India for a delicate baby, with a stomach quite unfit for the digestion of the heavy, coarse curd of cow's milk, which sets up purging and vomiting, forthwith to be put on a diet of goat's milk. Now, although goat's milk is more nearly allied to human milk than cow's milk, yet the casein which it contains coagulates in heavy, leather-like masses. Therefore, goat's milk is quite unsuited to meet the special difficulties of such cases, and rather than doing good it makes matters worse than before.

The advice given is mainly intended for Anglo-Indian mothers, but it is hoped that this little work will receive the attention, not only of such, but also that of the native ladies of high caste and better educated classes. The question of sound medical advice and good treatment for native ladies is being ably coped with by the Zenana Mission movement and the National Association for supplying Medical Aid to women in India. For these ladies hospitals are being established; and either in them or at home native ladies have now the opportunity of receiving the best possible medical treatment for themselves and infants at the hands of their own sex.

The work of introducing a knowledge of hygiene and preventative medicine among the bulk of the native peoples of India, where the women, for the most part, believe that almost all diseases are sent by angry gods, powerful demons, or evil spirits, is very difficult indeed, and advances can only be made in this direction side by side with religious and general enlightenment. The splendid work which has been undertaken by the earnest and devoted workers of the Zenana Missions is making its influence felt. And it is by increased knowledge of the laws of life and health, and the disease-producing causes, that we may hope to bring about an improvement in the existing condition of things. The efforts made in this direction are producing their effects upon women of the higher castes who have been brought under its influence, and this good work must in time make itself felt among women generally; but, as in all things in the East, progress is but slowly made. The object of the publication of this little work is to aid in the spreading of the elements of that knowledge upon which depends the preservation of health and prolongation of life.

CHAPTER II.

THE FUNCTIONS DEVOLVING UPON FOODS IN BABYHOOD.

BEFORE entering upon the important question of how to feed an infant, let us first consider the condition of a baby at birth, and the nature of its development and growth during the first few months of existence.

Rate of growth of a baby.—A healthy baby, if born at its full time, weighs a little over seven pounds, and measures about eighteen inches. During the first three or four days of its life it will lose weight, often as much as from four to six ounces. After this, if it is being properly fed, it will increase in weight day by day as its bones, flesh, nerves, and other structures are developing, till at the end of the first year of its life it will weigh eighteen to twenty-two pounds; in fact, during this period it will double or even treble its weight. This great increase in weight is quite unparalleled at any other stage of existence, and these facts will enable us to gain some idea of the enormous amount of work which must be performed in changing dead food into growing body.

The rapid transformation of food-stuffs into living baby teaches us that care should be bestowed upon the **selection of food** best calculated **to nourish the body,** and yet **easy of digestion.** A very large proportion of the babies who die during the first year of life are cut off by diseases which arise in connection with the stomach and bowels.

During this stage of life, at a very rapid rate the bones become more and more solid, the brain, muscles, lungs, and other organs rapidly increase in size, and they each require therefore large quantities of suitable nourishment to allow of their growth; on the other hand, during this period of rapid growth there is comparatively little activity of mind or body, the infant's time being largely taken up in sleeping and taking nourishment.

Whilst growth and development are going on at such a rapid rate, the milk which is supplied by the mother to breast-fed babies furnishes the materials from which nerve, flesh, fat, bone, etc., grow.

The natural food of a young baby is unquestionably the milk of a healthy mother, for this contains all the food substances which are required to build up the body. But it often becomes necessary for mothers in India to bring their babies up by hand, and then some artificial food becomes at once essential. That which is most like mother's milk in character will be the best. Arrowroot, cornflour, bread, and starchy foods generally are quite incapable of supplying material for nourishment and growth at this early stage of life, for they are **entirely unlike milk,** both in composition and character.

MOTHER'S MILK consists of *water* in which four classes of bodies are held, viz., *albuminose, fatty substances, milk-sugar,* and *salts.*

The albuminose material is so called from its resemblance to white of egg, the name being derived from the Latin word *albus,* white. This matter is mainly present in the form of casein, which yields white clots or curds. Casein of cow's milk is the substance which is largely used in making cheese. Albumins furnish materials to the blood which are employed for building up the living and growing structures of the body. Deficiency of this albuminose matter in a child's diet makes itself soon evident; the child's growth is interrupted, it becomes flabby and soft, feeble and pallid, and so its vital power and disease-resisting strength become reduced.

The fatty substances form the cream of milk. When milk is taken as food, the fats furnish to the blood materials which are required for the formation of brain and nerve, and which undergo chemical changes in the body, and so give rise to the production of heat.

The milk-sugar is allied to, but not identical with, cane-sugar; it is known as lactose, from the Latin word *lac,* milk. Lactose supplies the blood with substances which are used in the maintenance of the uniform temperature, and which are also concerned in the formation of fat. From its chemical composition milk-sugar, like all other varieties of sugar, belongs to a class of bodies termed *carbohydrates.*

The salts of milk yield to the blood mineral matters required in the formation of the bones, and different kinds of saline substance necessary for the life and the growth of all other structures. Salts of iron, magnesia, lime, potash, and soda are essential, and phosphate of lime seems to be necessary for the formation of most tissues. Probably no growth can take place without alkaline phosphates, for phosphorus is found as a constituent of all forms of living things, from the highest animal to the lowest vegetable, and none can grow in a medium deprived of it.

The watery part of milk is the agent by which the dissolved products of the various other food-stuffs are carried into the blood stream.

Since the above are the materials furnished by nature to build up the growing baby's body, next comes the question of the proportion of each. How much albuminoid matter does a child require? How much fat? How much milk-sugar?

COMPONENTS OF HUMAN MILK.

In 100 parts.	By Landois and Stirling.*	Gorup-Besanez † Average.
Water	87·24 to 90·58	88·90
Carbohydrate (Lactose)	3·15 to 6·09	4·36
Fat	2·67 to 4·03	2·66
Albuminose Matter	2·91 to 3·92	3·92
Salts	0·14 to 0·28	0·13

It has been ascertained as the result of numerous experiments, experiences, and observations, that in order to afford perfect nourishment to the body, food must contain materials drawn from each of these five groups of food substances. They are as essential for adults as for children, and no food can be perfect from which one of these is absent.

We may lay it down, therefore, as a rule that **an artificial food for a baby should contain** the following food-stuffs in the proportion given:—

Water	88·90
Lactose (or allied body)	4·36
Fat	2·66
Albuminose Matter	3·92
Salts	0·13

Normal mother's milk is the best food for infants, on account of its digestibility and the ease with which its products may be assimilated. Unfortunately, however, many mothers in India are unable to suckle their babies; in such cases the best substitute should be sought.

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* Landois and Stirling's *Physiology*.

† Cheadle's *Artificial Feeding of Infants.*

The following conditions necessitate the adoption of some artificial food :—

1. *Where the quantity of the breast-milk is deficient.* In such cases the child will take the breast ravenously, but, failing to get satisfied, soon stops and cries. In a few days the infant becomes peevish, pale, and thin, and soon exhibits the evidences of under-feeding and malnutrition. Such conditions always predispose a child to disease.
2. *Where the quality of the milk is poor* it ceases to rank as food, and by continuing to suckle a child with it the stomach is filled with a fluid which is incapable of nourishing him, the flesh becomes flabby and soft, and the baby suffers from wind, diarrhœa, or constipation.
3. *Where the mother is suffering from consumption,* or inherits a tendency to this form of disease. In such cases the weight of evidence tends to the conclusion that the germs of the disease may be transmitted to the child through the mother's milk.
4. *Where the mother is suffering from any other disease,* or is in a delicate state of health, and is in consequence taking medicines of any kind; for in such cases the milk becomes modified, and will disagree with the child.
5. *Where the mother's position in life or occupation* interferes with the full performance of the duties of nursing. In which case the feeding may become irregular, and the milk will vary in character, and consequently disagree with the baby.
6. In all cases where circumstances occur which render the *supply of natural food unavailable,* as, for instance, the mother's death, or from the obstruction of retracted nipples.

As has already been said, a mother ought always to try to suckle her child herself; but when she is unable to do so from any of the causes mentioned above, then some form of artificial feeding becomes necessary, and that method will be most successful, and attended with the best results, which most nearly conforms with the natural conditions of dietary.

Formerly the only safe alternative was the wet nurse, and in India even to-day this is the method resorted to in numberless cases. This plan is open to so many objections, that in England the system has been practically stamped out by a healthier condition of public knowledge. A native wet nurse is something to be avoided by a mother in India, as it is almost impossible to discover the antecedents of an ordinary woman.

Nurses in India are very fond of giving condensed milk, but we have observed that children brought up entirely upon this form of food are not so hardy or full of flesh as children reared on a more natural diet.

"There is another class of cases where nutrition is equally unsatisfactory, although the supply of food is liberal enough. These cases occur **where weaning is premature,** or where the child has been brought up by hand, and the kind of food chosen to replace the natural nourishment is injudiciously selected, so that the limited digestive power of the child is unable to convert it into material necessary for the growth and development of the tissues. Here the farinaceous diet, often substituted for the mother's milk, although nutritious enough in itself, yet supplies little nutriment to the infant. **A child is not nourished in proportion to the bulk of food he receives into his stomach. Only the food which he digests can possibly nourish the body.** Weakness in a child otherwise healthy, while it shows a deficient degree of nutrition, and therefore calls for an increased supply of nourishment, yet at the same time calls for greater care in the selection of the *kind* of food. **There is a difference between food and nourishment.** The very fact that the secretion of true saliva in the young child does not become established until after the third month, seems to indicate that before that age farinaceous articles of diet are unsuited to the infant, as saliva is one of the most important agents in the digestion of starchy foods." *

The food best adapted to nourish and build up all parts of a young baby's frame must therefore comply with the following conditions :—

1. *It must contain food substances which represent the components of mother's milk.*
2. *These food substances must be in the proper proportion.*
3. *It must be in a form suited to the simple conditions of digestion during infancy.*
4. *It must be fresh, and free from all taint or sourness!*
5. *The total quantity given during twenty-four hours must be such as to represent the nutritive value of from one to three pints of human milk, according to age.*

In selecting an artificial food, the first golden rule to keep well in mind is, then, that it should contain **all the food substances required in the proper proportions.**

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* Eustace Smith's "*Wasting Diseases of Children.*"

Three-fourths of the infants who die under the age of one year are those fed artificially, and most of these deaths are solely attributable to unsuitable food. A thriving baby, fed upon the proportions of food given on pp. 37 and 38, will appear happy and contented. The scales are the best means by which a baby's progress may be estimated. After the first three days, if kept upon a well balanced and suitable diet, it should increase in weight at the rate shown below.

1st Month . .	13 to 15 oz	13 oz.	8 lb.
2nd ,, ...	20 ,, 24 ,,	30 ,,	9 ,, 14 oz.
3rd ,, ...	24 ,, 30 ,,	27 ,,	11 ,, 9 ,,
4th ,, . . .	30 ,, 34 ,,	26 ,,	13 ,, 3 ,,
5th ,, . . .	34 ,, 36 ,,	21 ,,	14 ,, 8 ,,
6th ,, . . .	36 ,, 40 ,,	20 ,,	15 ,, 12 ,,
7th ,, . . .	40 ,, and upwards.	17 ,,	16 ,, 13 ,,
8th ,, . .		23 ,,	18 ,, 4 ,,
9th ,, . . .	,,	22 ,,	19 ,, 10 ,,
10th ,, . . .	,,	20 ,,	20 ,, 14 ,,
11th ,, . . .	,,	11 ,,	21 ,, 9 ,,
12th ,, . . .	,,	7 ,,	22 .

CHAPTER III.

HOW FOOD NOURISHES THE BODY.

SINCE the duties which devolve upon the various food-stuffs during all periods of life are as follows:—

1. *They build up the growing structures of the body;*
2. *They renew and make good the waste which goes on throughout life;*
3. *They supply the materials which are used in the production of heat and force.*

And since, also, the components of food in a more or less altered form must find their way into the blood before they can possibly discharge these duties, it becomes at once a matter of interest to every mother to know how the simplest food taken by her babe, even mother's milk, may become in time the blood, and then the flesh and bone and nerve of her child.

Although our primary object is to explain how the **digestive changes in an infant** fit food products to enter the blood, since we propose also in the latter part of the work to deal with the feeding of invalids and nursing mothers, we shall treat the subject from the broader standpoint. It must be borne in mind, however, that just as the food supplied by nature for a baby is simpler in character than that of an adult, so also the digestive

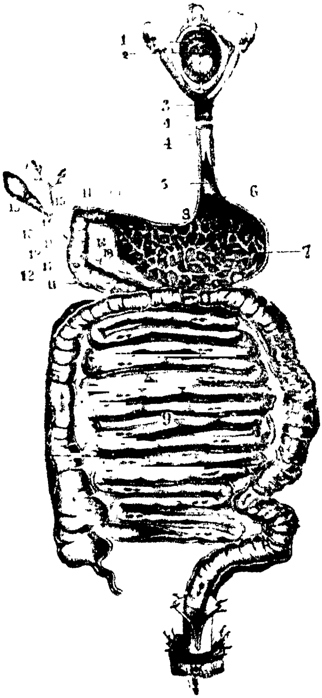

Fig. 1.—Organs of Digestion: 1, mouth; 2, tongue; 3, 4, 5, gullet; 6, gullet opening into stomach; 7, cardiac end of stomach; 8, lesser curvature of stomach; 9, small intestine; 10, opening of the pancreatic duct; 11, 12, small intestine; 13, gall bladder for storage of bile; 14, hepatic duct through which bile flows from liver into intestine; 15, hepatic duct from liver; 16, opening of hepatic duct into small intestine; 17, opening of pancreatic duct into small intestine; 18, pancreas.

changes which the food-stuffs undergo before passing into the blood are less complex.

Digestion is the name given to all the processes which take place in the body by which the constituents of foods are prepared to enter the blood. The structures which are concerned in bringing about these changes are termed the organs of digestion. These organs include in the adult: the alimentary canal (see Fig. 1), the mouth, teeth, and salivary glands, the liver and pancreas.

In the adult stage the food is *masticated* in the mouth by the aid of the teeth and tongue; and **starchy matters**, which are so largely present in vegetable foods, are **changed by saliva** into dextrin, dextrose, and maltose. Whilst starchy bodies are insoluble in water, and therefore cannot pass into the blood, the maltose produced is soluble. The *active principle of saliva*, which performs this important work of fitting starch to enter the blood, is not developed **in young children, therefore starchy foods cannot be digested.**

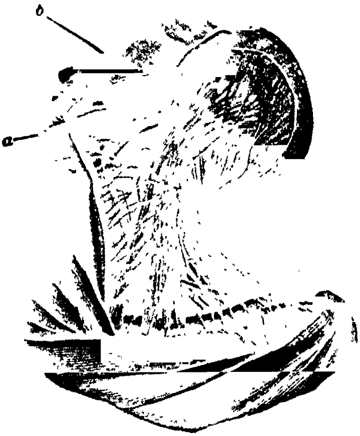

Fig. 2.—The Salivary Glands; *a*, *b* show position of those glands.

The salivary glands which secrete this active digestive fluid in the adult are shown in Fig. 2. **The starch-digesting** power of the saliva does not begin to develop until about the fourth month after birth. Nature supplies mother's milk as the natural food of a young baby, and since **no starch or allied body is present in mother's milk** the digestive agent for starch is not present in saliva at this early stage of life, and it is only gradually developed about the time that the teeth begin to make their appearance. **Starchy foods are therefore starvation foods for young children.**

In ordinary digestion, at periods beyond early infancy, the food having been masticated in the mouth, and its starchy components partially changed by saliva, it is passed into the gullet (see Fig. 1), and down this tube it is conducted into the stomach.

In the stomach a fluid is made from blood known as **gastric juice**; this body possesses the power of changing the **albuminose constituents of foods** into soluble bodies known as peptones. The stomach has muscular walls which keep the food in motion so that all parts are brought into contact with the juice which is poured out by the membrane which lines the organ. Here milk is curdled in a baby's stomach, and in the case of cow's milk the **thick flocculent cheese-like casein** which is produced often gives rise to such irritation as to cause vomiting. From the stomach some of the dissolved derivatives of food pass directly into the blood-vessels which are very abundantly distributed to the thin membranes which line this organ (see Figs. 3 and 4).

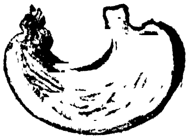

Fig. 3.—Interior of stomach with the mucous membrane which secretes gastric juice from blood.

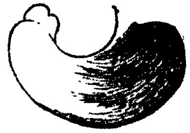

Fig. 4.—Portion of muscular coat of stomach which keeps the contents of the organ in motion during digestion.

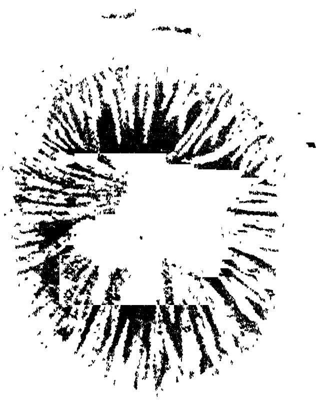

Fig. 5.—Section through the small intestines, showing the villus coat by which the tube is lined and the blood-vessels.

From the stomach the residue of the food passes into the small intestines, where it is subjected to the action of the fluids which are poured into the intestines by the pancreas and liver. The pancreatic juice contains several active agents which produce changes in the components of foods; one curdles milk, another dissolves albumins, a third converts the remaining insoluble starch into soluble dextrose and maltose, and a fourth reduces fatty substances to a very

The bile which flows from the liver into the small intestine assists in a general way the digestive work of the pancreatic juice. **In the adult stage,** then, the residue of starchy and albuminose food-stuffs which has escaped the action of saliva and gastric juice, may be digested and made fit to enter the blood in the intestines. The digestive principle of pancreatic juice, which converts starch into maltose, is known as pancreatic diastase. This active body is not present in the pancreatic juice of a baby during the first few months of life. **In young infants, therefore, starchy food-stuffs cannot be digested in the intestines any more than they can be dissolved in the mouth.** foods, when given at this early period of life, set up such irritation of the digestive canal that the substances are hurried unduly along before even the other food-stuffs present besides starch can be digested and absorbed.

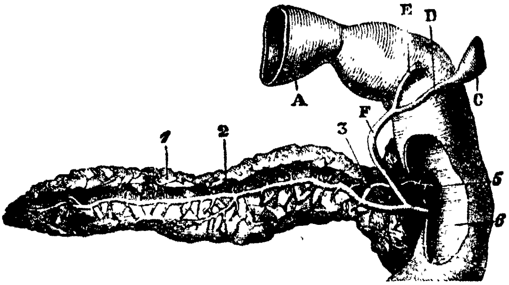

Fig. 6.—Pancreas and intestine. A, end of stomach; 1, 2, 3, the tube along which pancreatic juice flows into the intestine; C, the gall bladder; D, the duct from the gall bladder; E, the duct from the liver.

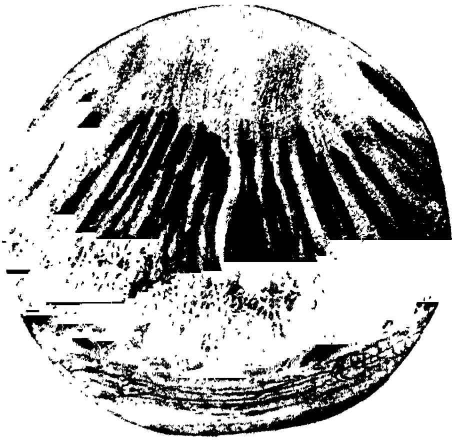

Fig. 7.—Highly magnified view of the villi of the small intestines and the blood-vessels into which the dissolved constituents of the food pass. Each villus is supplied with a perfect network of blood-vessels.

The dissolved derivatives of foods which result from the action of the digestive juices upon the various food-stuffs chiefly find their way into the blood, which flows through the blood-vessels of the lining membrane of the stomach and intestines (see Figs. 5 and 7). This blood becomes in consequence so modified that it is quite unlike the ordinary blood of the body. The blood, enriched by the dissolved materials derived from the foods, flows from the walls of the stomach and intestines through a vessel known as the portal vein into the liver; in this organ it is considerably changed and made fit to join the general stream of blood.

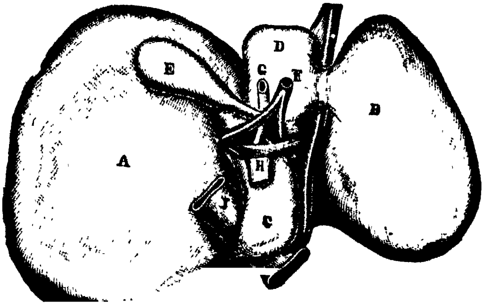

Fig. 8.—The liver showing (A, B, C, D) the lobes; H, the hepatic vein.

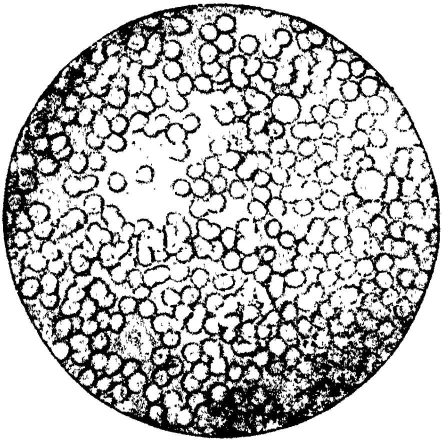

Fig. 9.—A drop of human [illegible], [illegible], [illegible] showing corpuscles; the larger bodies are corpuscles.

The finely divided fatty substances derived from the digested foods soak through the thin velvet lining of the small intestine (see Fig. 7) and mainly pass into small tubes which are present in the little villi. These tubes are known as lacteals; they unite, forming larger and larger vessels, until at length they pour their contents into a large quill-like tube which runs up the back portion of the body, as shown in Fig. 10. This tube passes through the back part of the chest or thorax, and is therefore known as the thoracic duct. It opens into the great veins on the left side of the neck. Thus, while the dissolved derivatives of the foods chiefly find their way directly into the blood stream of the membranes of the stomach and intestines, the fats pass indirectly into the blood by way of the lacteals.

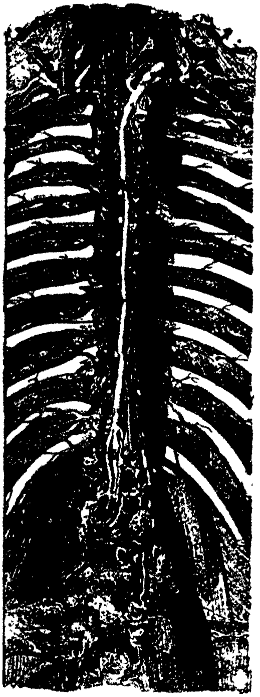

Fig. 10.—The thoracic duct through which the fatty materials derived from food chiefly find their way into the blood stream.

The blood, which is from time to time enriched by materials derived from foods in the manner above described, consists of a clear colourless liquid in which an immense number of very minute coloured bodies, known as corpuscles, float with a smaller number of colourless bodies known as white corpuscles (see Fig. 9).

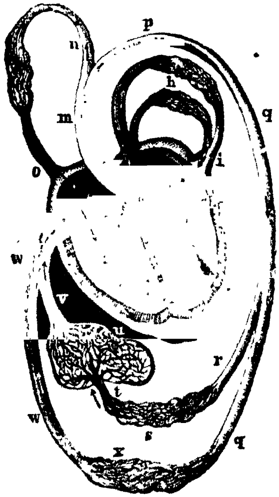

Fig. 11.—Diagram to show the course of the blood in circulation. The arrows indicate the direction; s, t, represent the circulation in the stomach and intestines; and u, the blood vessels in the liver. The central structure represents the heart with its four ch

When a drop of human blood is placed on a slip of glass and examined by means of the high power of a good microscope, it presents the appearance shown in Fig. 9. The minute bodies, known as red and white blood corpuscles, may be distinctly seen in the illustration.

After having undergone certain changes in the liver, the blood returns with the stream from the lower part of the body to the heart (see Fig. 11, w).

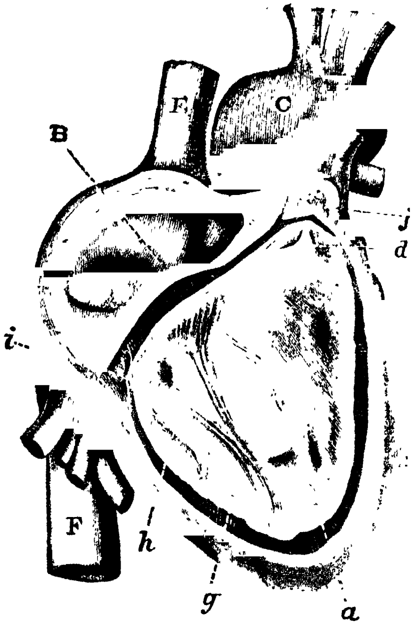

Fig. 12.—Right side of the heart showing the chambers, valves, and great blood vessels. E and F, the two great veins of the body through which impure blood passes into the heart; *d*, the opening of the pulmonary artery through which blood flows into the lungs.

Blood enters the right auricle, a chamber at the top on the right side of the heart; it next passes into the right ventricle, by the muscular walls of which it is forced into the lungs (see Fig. 11, g, h). From the lungs the blood flows on into the left auricle and then passes into the left ventricle, by which it is forced to all parts of the body. As the blood is forced through all the blood-vessels by the heart, it passes from arteries into small capillaries, and then into veins, and so back to the heart. During the passage of the blood through the small and thin-walled capillaries, which are present in nearly all parts of the body, it supplies material capable of nourishing the living growing structures.

This stream of nutritive material from which all the structures of the growing baby derive the material for their growth and energy is kept in constant motion during life by the heart. Materials in healthy and well-fed infants are continually being taken up by this blood from the digestive canal, and just as continually taken out of it by the tissues of the body. In the course of the circulation the blood passes through the lungs, skin, and kidneys, where certain waste materials are removed from it, and ultimately cast out of the body.

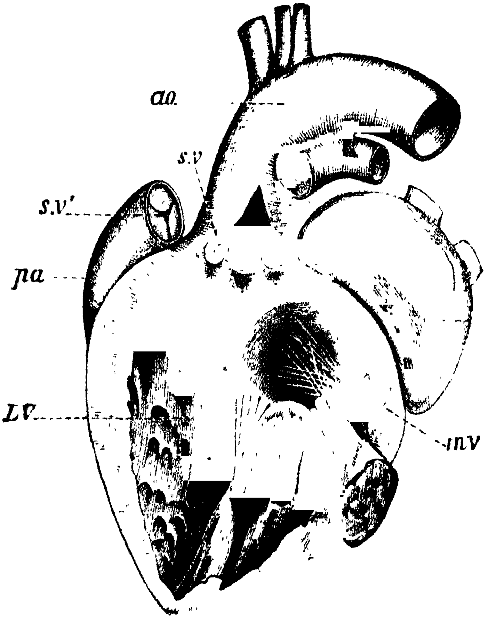

Fig. 13.—Left side of the heart, showing the chambers and valves. L A, left auricle; L V, left ventricle; *a o*, aorta through which blood flows to all parts of the body; *m v*, the mitral valve which guards the opening between the left auricle and ventricle, and prevents the return of blood to the auricle during contraction of the ventricle.

CHAPTER IV.

MILK AS FOOD FOR INFANTS.

IT is only of late years that the question of preparation and adaptation of an artificial food to the peculiar digestive conditions of an infant has been scientifically studied. With a wider knowledge of physiological laws, and a deeper insight into the composition of foods and the changes they undergo, broader and sounder principles have been enunciated; which are founded upon a more exact knowledge of the properties of human milk and of the structure and action of the digestive organs of an infant.

Healthy mother's milk, we have seen, may be regarded as the **ideal and perfect food for a baby**: an artificial infant's food must therefore resemble this very nearly both in composition and properties. All such food materials as arrowroot, cornflour, potatoes, bread, and starchy or farinaceous foods in general, no matter how carefully they may have been prepared, act at this early period as so many poisons.

The high death rate among infants in India during the first year of life is to be mainly traced to the frequency with which such cheap **farinaceous starvation foods** are given at this stage. In certain cases where vigorous and healthy infants have survived the use of such artificial foods, the credit is rather due to the nutriment derived from the milk, etc., which is added, than to the farinaceous materials themselves.

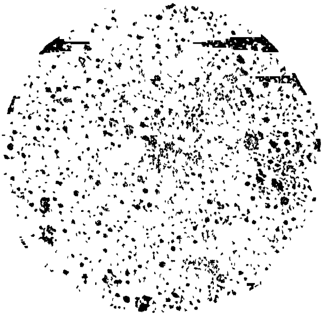

FIG. 14.—Milk as seen under the microscope, highly magnified, showing fat globules and casein.

Only those substances which are soluble can pass from the digestive canal into the blood stream; **starch being insoluble** must be changed by certain of the digestive juices into soluble bodies allied to sugar, before it can possibly enter the blood stream. For very young children starchy foods are of no value, and in most cases they are directly harmful, for the simple reason that the ferments which are necessary for their change into soluble substances are not present in their digestive juices.

Mother's milk, the natural food of a very young infant, contains no starchy matter, but a variety of sugar known as lactose. The starch of vegetable foods is converted into a kind of sugar in the body of the mother beforehand. **Nature, therefore, does not provide at this early stage of life any material for the digestion of starch.** Although nature has not endowed infants with the power of using starch as a food, and this substance cannot possibly serve as nutriment for infants, but rather as a poisonous irritant, yet most artificial foods, with profound indifference to the teaching both of physiology and chemistry, have starch as their basis.

A vegetable ferment, known as diastase, present in malt, will produce a similar change in the condition of starch to that which is brought about by the natural digestive juices in man, after the period of early infancy. Advantage is taken of this fact in the manufacture of Mellin's Food, in which preparation the starch of the materials employed is entirely converted into such soluble products as can readily be made use of in the body of a baby.

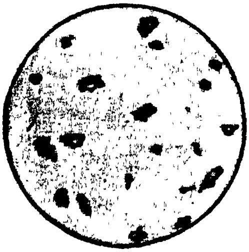

Fig. 15.—Mellin's Food mixed with water, as seen under low power of microscope. The small irregular granules are of Gluten.

The immense importance of securing a non-starchy food for young babies becomes at once apparent; but in consequence of the many devices which manufacturers have of masking the real nature of their preparations, it is evident that it would be an advantage for every thoughtful mother and nurse to know a simple method of ascertaining the presence or absence of this material. The presence of starchy matter in an artificial infants' food may easily be detected by any nurse or mother who will take the trouble to perform the following simple experiments:—

Mix and heat a very small quantity of the suspected food with water, allow it to cool, and then add a few drops of a solution of iodine, which may be obtained from any chemist; if the mixture turns blue, or becomes so dark as to appear black after the addition of the iodine, **know that starch is present,** and discard the food. If, on the other hand, the substance is simply stained yellow or brown by the iodine, **then starch must be absent.**

The presence or absence of starch may also be determined by microscopic examination, for the starch grains are of a peculiar structure, and may, in consequence, be identified (see Figs. 17 and 18).

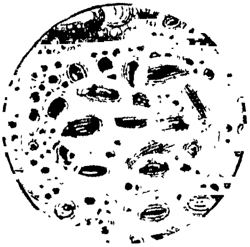

Fig. 16.—Section of Wheat showing wheaten starch as seen under the microscope.

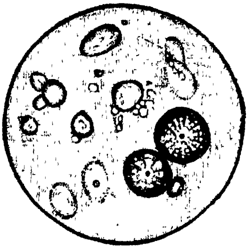

Fig. 17.—Starch granules as seen under higher magnifying power of the microscope.

It should be remembered that the digestive organs of an infant are exceedingly delicate, and liable to be deranged by apparently trifling causes; but a diet which conforms with the following conditions has been proved to be attended with satisfactory results:

1. *The food must contain the substances required for the nutrition of all parts of the baby frame in the proper proportion.*
2. *The constituents of the food selected should be in a suitable condition,* i.e., *in such a form that the infant is able with ease to digest and assimilate them.*

All milks resemble each other in general composition, but the proportions in which the same constituents are present vary. The following table shows the comparative composition of human milk with others which are employed in feeding infants:—

In 100 Parts.	Water.	Albumins.	Fats.	Lactose.	Salts.
Human Milk . .	88·90	3·42	3·33	4·55	0·21
Ass's „ . .	89·01	3·57	1·85	4·50	0·55
Cow's „ . .	87 5	4·21	3·82	3·67	0·71
Goat's „ . .	86·85	3·79	4·34	3·78	0·65

In theory diluted cow's milk very nearly resembles mother's milk in composition, but there are **several objections to the use of ordinary cow's milk or buffalo cow's milk.**

1. **Human milk contains more milk-sugar than cow's milk;** the former contains one-seventh to one-fifth more of milk-sugar than the latter.
2. **Cow's milk is more difficult to digest** than human milk. The total albuminoid material in cow's milk is about one-third greater than that in human milk. The albuminose substances are of two kinds, viz., Casein and Albumin.

In human milk the proportion of this albumin is greater than in cow's milk. The main difficulty in the digestion of cow's milk **by infants** is due to the fact that the casein is mainly converted into a curdlike clot in the stomach; here and in the intestines it acts as an irritant.

3. **Cows' milk is often acid in reaction,** whilst human milk is alkaline. The milk of stall-fed cows has invariably some acidity; but that obtained from pasture-fed animals of the hill stations is usually neutral or alkaline. Milk with an acid reaction is never so wholesome for infants, and very frequently produces derangements of the digestive organs. Nursing mothers should learn **how to detect this acid condition of milk,** and at the same time understand how to correct it, for such milk is certain to disagree with the baby. The acidity may be tested for by means of strips of paper stained with red and blue vegetable colouring matters which are sold at the chemists' under the name of litmus-papers. A strip of blue litmus-paper should be dipped in the milk to be tested; if it is turned decidedly red this indicates that the milk is acid—**such milk should be rejected**; but if no better is obtainable, then it may be rendered less objectionable by adding a pinch of bicarbonate of potash, or enough lime-water to turn the reddened litmus-paper blue again. Where Mellin's Food is employed with cow's milk it is unnecessary to adopt this precaution.
4. **Cow's milk is frequently falsified and impoverished** by the removal of cream and the addition of water. The addition of water and removal of cream renders milk thinner and less opaque in appearance, and of course reduces its food value and destroys its character.
5. **Milk is frequently adulterated** by the addition of materials to preserve it from decomposition during transit. The least harmful of those commonly employed is perhaps boric acid, eight to ten grains of which added to a pint of new milk will keep it fresh for several days in summer. This quantity of boric acid would render the milk injurious to the child. Salicylic acid has also been employed for the purpose of preserving milk, and this substance appears to be more injurious even than borax or boric acid.

6. **Cow's milk**, like other highly organised fluids, **is very prone to absorb from the air gases and living germs,** for the latter of which it acts as a cultivating medium. The milk that a baby takes direct from the breast cannot be contaminated by any atmospheric impurities; but that which has been drawn from the cow and exposed to the air will be found to contain various kinds of non-living and living particles. Of these materials the most objectionable are the living organisms, certain of which cause the souring. Milk on the point of souring is just the worst for babies, for the indigestible curd then rapidly forms in the stomach.

The minute organisms which give rise to infectious diseases may find their way into cow's milk, either from the air, or from water which has been employed for washing the dairy utensils, or from water which has been used in adulterating the milk. **Epidemics of typhoid fever, scarlet fever, diphtheria, dysentery, and cholera have been repeatedly traced to milk supplied from places where the disease existed.** It seems, also, very highly probable that tuberculosis or consumption may be directly transmitted from a cow through the milk to an infant consuming it. A simple means to counteract the dangers to which the baby is exposed in certain cases, through the use of cow's milk, is *to boil it as soon as it comes into the house.*

Advantages gained by boiling milk:—

(*a*) Living organisms with which the milk may be contaminated are destroyed, and therefore the tendency to fermentation and decomposition is reduced.

(*b*) The curd is rendered light and digestible. Formerly the idea prevailed that by boiling milk was rendered indigestible, and the medical advice was that it should be scalded before use, but a wider experience has demonstrated the fact that the casein is broken up and its digestibility considerably increased by boiling.

(*c*) Boiled milk will keep sweet much longer than unboiled milk.

STERILISING is a modification of the simple method of boiling which has recently grown in favour* with medical men both in Europe and America. Where fresh milk is difficult to obtain, the supply is intermittent, or its origin is of a doubtful nature, or during periods of epidemics, mothers may be strongly recommended to sterilise cow's milk before use. The plan usually adopted of sterilising is to fill a number of pint bottles with fresh cow's milk diluted with water to the required strength. These are immersed to their necks in a vessel of water, the outer vessel is heated and allowed to boil for about half an hour. The bottles are carefully corked, cooled, and placed aside for future use. By this prolonged application of heat living organisms are destroyed, and the milk keeps fresh and sweet for an indefinite period.

Condensed milk is used to a very considerable extent throughout India. The different brands vary so much in composition that it becomes exceedingly difficult to speak of the value of this substance in any general terms.

The milk of the ass and the goat more nearly resemble mother's milk in composition than cow's milk; but whilst the former is only to be obtained with difficulty, the latter possesses a peculiar flavour and unpleasant odour; for these reasons they are very seldom used. Neither can be advised for use in India. Another disadvantage of goat's milk is that these animals are often careless and dirty feeders, and, in consequence, the milk yielded is variable in character and usually unreliable. The goat, however, possesses this advantage, that it may be kept by even poor families at little expense, so that where due care is taken with the feeding good fresh milk becomes at all times available.

Cow's milk is the easiest to obtain, and **is the best basis of an artificial diet for a baby**. As explained above, cow's milk contains more *casein, and less water and milk-sugar, than human milk*; it becomes necessary therefore to *reduce the proportion of casein* and to *increase* the other ingredients mentioned.

Even those children who are fed entirely upon cow's milk are not free from danger. Cow's milk contains a larger quantity of solid matters than woman's milk, owing principally to an increase in the amount of casein. A notable deficiency in the digestive power of infants is the inability to deal with any mass of solid or semi-solid matter. They can only digest solids when in an extremely fine state of division. Some few children are, no doubt, found to thrive upon this diet, their digestive power being equal to the demands made upon it. Others, however, and by far the larger proportion, are not equal to this daily call upon their powers. They cannot digest this mass of curd. Consequently, unless rejected by vomiting, it passes through them undigested; their wants are not supplied, and they starve for lack of nourishment, although swallowing every day a quantity of milk which would be ample support for a much stronger and healthier infant. Such children become exceedingly restless and irritable.

Cow's milk must therefore be greatly modified before it can so closely resemble human milk in chemical composition and physiological properties as to be suitable for an infant's use.

By dilution with water, the proportion of albuminoids may be reduced so as to represent those in human milk, but the indigestibility of the casein is not in the least overcome, and must be remedied in some other way, since the albuminoids are of the utmost importance in the nutrition of infants as well as of adults. The amount of milk-sugar, already smaller in proportion than in human milk, will be further reduced in the diluted cow's milk, and the mixture will in most cases be acid in reaction instead of alkaline. Heat and force-producing food-stuffs which are represented by milk-sugar are absolutely necessary for life and health. Infants cannot obtain milk-sugar from starchy food or from cane-sugar, for these, before they can be assimilated, must be changed by the digestive fluids, which are very inadequately secreted by infants. **Cane-sugar is very liable to ferment in the alimentary canal,** *giving rise to acid irritating products that impede digestion.*

While the amount of ash in cow's milk somewhat exceeds that in woman's milk, it has been found that the relative amount of potash salts is greater in woman's than in cow's milk; this deficiency of potassic salts must therefore be supplied.

"A more important difference is the denseness of the clot formed by the curd of cow's milk. Ample dilution with water does not affect this property. Under the action of the gastric juice, the particles of casein still run together into a solid, compact lump. . This is not the case with milk from the breast. Human milk forms a light, loose, flocculent clot, which is readily disintegrated and digested in the stomach. The difficulty which even the strongest children find in digesting cow's milk is shown by the masses of hard curd which a child fed exclusively upon this diet passes daily from the bowels. This difference between the two milks is answerable for much of the trouble and disappointment experienced when attempts are made to bring infants up by hand; and unless measures are adopted to hinder the firm clotting of the casein, serious damage may arise." *

---

* Dr. Eustace Smith.

In order, then, that cow's milk may be similar to human milk in chemical composition and physical properties, and therefore be fit for an infant's use :—

1. *The casein must be made easily digestible and the proportion must be reduced.*
2. *The proportion of carbohydrate must be increased.*
3. *The fluid must be rendered alkaline.*

Starch is changed in the body of the mother into a substance which yields milk-sugar. In the preparation of the best artificial food for the use of infants in India the whole of the starch in the wheat employed is changed into varieties of sugar outside the baby's body.

Malt contains a ferment known as "*diastase*," which under proper conditions will convert starch into dextrin, and maltose (malt-sugar), just as starch is similarly converted by the saliva in the adult. Liebig, working upon these lines, suggested that an infant's food should be prepared from wheat, malted barley, water, cow's milk, and a slight amount of potash salts. Correct and ingenious as are the principles upon which it is designed, the difficulty of its preparation is an objection so great as to forbid its use in the family.

Mellin's Food entirely fulfils the conditions which are necessary in making a perfect food adapted for babies of all ages. This food is easily prepared, supplies in suitable form the deficiencies which exist in cow's milk, makes the casein readily digestible, and the milk alkaline. The starch is completely converted into maltose or malt-sugar and dextrin. It is **the best substitute for mother's milk,** for when it is prepared the components are in the same proportions as in that perfect and natural food. This is very important, since the ratios existing in human milk between sugar, fat, and albuminose material cannot with safety be greatly altered in an artificial food for young babies.

CHAPTER V.

ARTIFICIAL FOODS FOR INFANTS.

FROM the preceding pages we have seen that it becomes absolutely necessary to add some artificial food to cow's milk in order that it may be brought up to the conditions which are necessary for healthy baby life. Various preparations have been placed upon the market which pretend more or less to fulfil the requirements. They may be classed as follows:—

1. **Purely farinaceous foods.** These are purely vegetable products, which consist mainly of starch, and although they may be of more or less value as foods for adults, they **are of no value as foods for infants**. Farinaceous foods cannot be digested by infants, for the digestive ferments which are present in the adult stage for the transformation of starch into maltose are not present in the saliva of young babies. Foods of this class are worthless as nutrients to babies, and often even worse, for they act as irritants upon the digestive canal, and produce derangement of the same.
2. **Farinaceous foods with malt.** Foods of this class are prepared by grinding wheat and malt, or by mixing wheaten flour or baked flour and malt extract. Such preparations contain, therefore, starch and indigestible matters, which act as irritants rather than as nutrients. Artificial foods of this character are therefore *not adapted for young or delicate babies.*
3. **Condensed milk** is so variable in composition and character that it becomes difficult to speak of it in general terms. For the following reasons condensed milks *cannot be classed as efficient and satisfactory for babies*—
   - (*a*) They are frequently sweetened with cane-sugar, the disadvantages attending the use of which substance have been already referred to.
   - (*b*) The casein is usually present in an inert and indigestible form.

(*c*) In the case of some infants either the milk or some ingredients used to preserve it give rise to intestinal irritation, and the consequence is the child does not thrive, but becomes sickly.

(*d*) In India supplies of condensed milk are apt to be old and unreliable.

4. **Sterilised Milk** is largely used in conjunction with other solid artificial foods in America, but the weight of evidence seems to be in the direction of the conclusion that **by the continued use of sterilised milk scurvy is favoured.**

5. **Mellin's Food** is a soluble, dry extract which is prepared from wheat and malted barley; it consists of dextrin, maltose, albuminoids, and soluble phosphatic, potassic salts, etc.

   It is entirely free from starch and cane-sugar, the starch having been transformed into dextrin and maltose by malt diastase, and it is alkaline in reaction. Added to diluted cow's milk it **forms a perfect food for the youngest babies, built up on the plan of mother's milk.** It supplies materials which *assure the digestion of the milk by the infant*; it makes the albuminoids of milk, which would otherwise be coagulated into a tough, hard curd in the stomach, light and flocculent, as in mother's milk; in short, the character of cow's milk is so changed by the addition of Mellin's Food that the mixture shows the closest approximation, chemically and physiologically, to human milk.

6. **Mellin's Lacto-Glycose.** Where difficulties exist in obtaining regular supplies of good fresh milk, the preparation known as Mellin's Lacto-Glycose, or Milk Food, which is obtainable throughout India, has been proved to possess the highest feeding value. This food is prepared from fresh cow's milk and Mellin's Food, and it possesses the following advantages:—

   1. It is never sour, and is constant inchemical composition and physical properties.
   2. The meal for the baby can be prepared with the greatest ease, for the Lacto-Glycose has merely to be mixed with warm water,

3. The mode of preparation reduces the danger from disease germs to a minimum.
4. Another great advantage which cannot be too highly estimated by military people in India is that it secures constancy of character of diet, when moving from place to place, and thus the evils which arise from change of cow's milk are avoided.

Three distinctive advantages of Mellin's Food will be at once appreciated:—**it is easily digested and very assimilable and nourishing,** so that, when dissolved and prepared, it is ready for immediate assimilation; it is free from husks and indigestible inert matter that would cause irritation. The value of these properties will be highly appreciated when it is remembered that the digestive organs are simpler, and **the necessity for readily available nourishment** is greater in a baby than in an adult. By the use of Mellin's Food and the exercise of proper care, those diseases which make such frightful havoc among infants—diarrhœa, convulsions, the wasting diseases—have been largely decreased, and may be still further reduced.

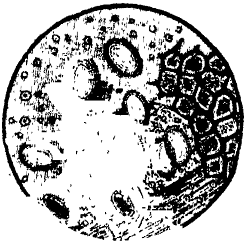

Fig. 18.—Mellin's Food as seen in the dry state under the microscope. Gluten and Albumin Granules, Maltose Grains, and Dextrin may be seen. These dissolve upon the addition of water.

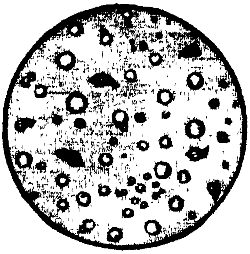

Fig. 19.—Mellin's Food when first dissolved in cow's milk as directed on page 39. The rounded bodies are milk globules, and the small granules of albuminoids.

Mellin's Food prepared with *cow's milk.*

Water	85·34
Carbohydrate	6·95
Fat	2·54
Albuminose Matter	4·45
Salts	0·72

The foods above described all more or less perfectly fulfil the conditions of complete foods, and although of variable composition are of sufficiently general nature to warrant their

inclusion under the head of **General Foods**. As pointed out, many are bad for young infants, yet at some other period of life they may be of high value as nutriment.

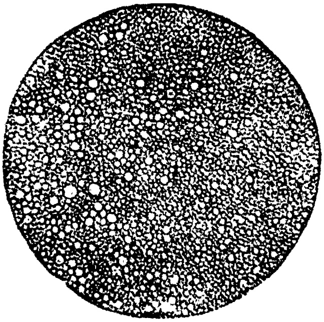

Fig. 20.—Mellin's Emulsion as seen under highly magnifying power of microscope, showing finely emulsified fat (cod liver oil).

7. Accessory or Supplementary Foods. The foods which are to be included under this head are special, and are intended to supply supplementary nutritive materials required as a result of peculiarities of constitution, or through the changes brought about by unhealthy environment. In this class we may include special forms of oil or fatty food, and mineral foods. Of the former **cod liver oil** is the best example, and of the latter lime, phosphatic and potassic salts are the best known, preference being given to the hypophosphites. Fat is essential as a food, and under certain conditions of climate and constitution it is demanded by the body in larger proportion than is contained in any food. These conditions are often set up in the case of Anglo-Indian children. The most readily digestible form of fat is cod liver oil; but this has its disadvantages, and it is quite impossible for many sickly and weakly infants to digest the plain oil. As explained on p. 21, **fats must be emulsified**; that is, they must be very finely divided before they can pass out of the digestive canal on the road to the blood. The fat of milk forms a most perfect emulsion, and the digestibility of this fat depends mainly upon the fine state of division in which it exists. (Compare Figs. 15 and 21.) **Mellin's Emulsion of Cod Liver Oil** is a milk-like fluid in which the cod liver oil is mechanically and permanently divided. This substance may be regarded as a supplementary food of the highest value for weakly children in India. It possesses the following advantages:—

1. It has a pleasant, creamy flavour.
2. The emulsification is so perfect that, like milk, it may be **mixed** with any neutral liquid, such as milk or water, in any proportion to suit the palate and requirements of the patient, child or adult.
3. **Containing hypophosphite of soda and lime, it has a supplementary food value in addition to that imparted by the fat.**

CHAPTER VI.

THE ARTIFICIAL FEEDING OF INFANTS.

IT is impossible to prescribe exact quantities and proportions of food for a growing baby, and judgment must therefore always be exercised regarding the proportions of Mellin's Food, milk, and water needed by an infant; but the following may be taken as **typical proportions for a diet** under the age of three months:—

Infants of THREE MONTHS and Under.

Mellin's Food	Half a tablespoonful.
Water, *hot, not boiling* . .	A quarter of a pint.
Milk	A quarter of a pint.

(For infants much under the age of three months it may be found necessary to decrease the proportion of milk, so that instead of equal parts of milk and water the proportion of milk to water must be as 1 to 2 or as 1 to 3.)

Preparation of the Food.—The Mellin's Food may be dissolved in hot (not boiling) or in cold water, and the milk may be added hot or cold. A very convenient method is to first dissolve the Mellin's Food in a little hot water, and then add the remainder of the water and the milk.

What, however, well suits one baby may not suit another, and a careful nurse when she sees the child fretting on food of one strength should vary the proportions. At the same time it is most undesirable that changes should constantly be made and experiments tried from caprice. It is a very great mistake when a baby is doing well to be too easily influenced by others into changing its diet.

Promiscuous advice is constantly poured out to young mothers, and they too often are so ready to follow that the baby has not a fair chance. If the child thrives on the above diet then leave well alone.

On the other hand, if the infant is not satisfied, but cries almost immediately after feeding, and exhibits constant restlessness, these may be taken as indications of either the insufficiency of the food, or that it is not rich enough in character. Should these conditions arise, do not start some other food, but merely increase the quantity of Mellin's Food little by little until the baby is satisfied by its bottle, and grows contented and happy.

As the child grows, and the demands made by his organs increase, the quantities of Mellin's Food and milk used may be gradually increased so as to meet the requirements of the rapidly developing body. It must be continually kept in mind that *a proportion of Mellin's Food sufficient to insure the thorough digestion of the milk must at all times be used.*

The temperature of infants' food for all ordinary cases should be about that of healthy living blood, 98° or 100° Fahrenheit. The mother or nurse should always try it herself before giving it to the babe, and when the liquid is comfortably warm to the mouth it is of the right temperature; *it should not be given lukewarm.*

The amount of food required by an infant is most conveniently spoken of in terms of fluid ounces. Twenty fluid ounces make a pint (two tablespoonfuls equal about one fluid ounce); an ordinary sherry glass will contain about two fluid ounces.

The quantity of food required at each meal, and the time and frequency of feeding, will vary with the constitution, size, and age of the baby, and under average conditions the following rules should hold good:—

FIRST WEEK *give from* 1 *to* 1½ *fluid ounce of prepared Mellin's Food* every two hours night and day, although, if possible, even during the first week, night feeding should be avoided. During the second week in ordinary cases night feeding may be dispensed with, and thus sufficient continuous repose secured to both mother and baby.

SECOND WEEK to end of first month *give from* 1½ *to* 2 *ounces of prepared Mellin's Food* every two hours from about 5 a.m. to 10 p.m. At the same time, though regularity and punctuality should be carefully observed in the feeding of infants, yet they need not be rigidly adhered to—slight variations in the demand of the baby will occur from day to day.

SECOND MONTH *give from* 3 *to* 3½ *ounces of prepared Mellin's Food* every two or three hours, from 6 a.m. to 10 p.m.

THIRD MONTH *give from* 3 *to* 4½ *ounces of prepared Mellin's Food* every three hours from 6 a.m. to 10 p.m.

FOURTH MONTH *give from* 4 *to* 5½ *ounces of prepared Mellin's Food* every three hours from 6 a.m. to 10 p.m.

FIFTH MONTH *give from* 5 *to* 6 *ounces of prepared Mellin's Food* about every three hours from 6 a.m. to 10 p.m.

SIXTH MONTH *give from* 5 *to* 7 *ounces of prepared Mellin's Food* as directed for fifth month.

The Quantity of Mellin's Food to be mixed with milk at different ages.—It is difficult, in fact practically impossible, to give fixed rules applicable in all cases for the preparation of the meal with Mellin's Food, or to prescribe the exact quantity to be given for a meal, since some infants are healthy, strong, and constitutionally perfect; while others are ailing, weak, and without stamina. It is therefore incumbent on mothers and nurses to use their own discretion in preparing the Mellin's Food. *By a little patient experiment, the suitable proportions of the dry powder, milk, and water, the right quantity for a meal, and the proper temperature for each individual case may soon be determined;* but in all cases it is necessary that an amount of Mellin's Food sufficient to ensure the digestion of the milk should be used. The first sign of indifference, it may be remembered, is a sure indication that the infant has had enough, and the bottle should be at once removed from his sight and not given to him again until the next meal.

Frequency of Feeding.—The frequency with which infants are fed is of importance, as well as the quality of the food. For the first two or three weeks the quantity given at each meal should be moderate; three to four tablespoonfuls every two hours will generally be sufficient. This quantity should be gradually increased as the child grows older, and at the same time the child may be fed less often.

Care must always be taken that the meals are not too frequent, or too large in quantity. Young mothers are often inclined to overfeed their babies. If the stomach be constantly overloaded, even with a digestible diet, the effect is almost as injurious as if the child were fed upon less digestible food in more reasonable quantities. It is a great mistake to accustom a child to take food whenever he cries. When a child is hungry he must be fed, but all cries are not from hunger, and a mother should learn to distinguish them. Some cries are from thirst, and a teaspoonful of cold filtered boiled water should be given.

Infants of SIX MONTHS and Over.

Mellin's Food	One tablespoonful.
Water, *hot, not boiling* . . .	Four tablespoonfuls.
Milk	Make up half a pint.

Dissolve the Mellin's Food in the hot water by stirring, then add the milk, and mix thoroughly.

As the child grows older, the proportion of milk and the quantity of Mellin's Food may be still further increased; but when the proportion of milk is increased, *the quantity of Mellin's Food must be increased at the same time.*

When the infant is to be fed, *stir the mixture thoroughly,* pour out a sufficient quantity, and warm it to the proper temperature over a lamp or fire; or pour it into the feeding-bottle, and warm by placing the bottle in hot water.

AFTER THE SIXTH MONTH the diet should be somewhat richer in Mellin's Food, and about 6 *to* 8 *ounces* should be given at a meal, while five meals in the twenty-four hours will usually suffice. After nine months the yolk of an egg, or a little beef or veal tea, may be added to the diet.

AFTER THE TWELFTH MONTH, in addition to prepared Mellin's Food, once a day red meat gravy, with a small quantity of fat from the joint, and mashed potatoes or rice may be given.

FROM TWELVE TO EIGHTEEN MONTHS OR TWO YEARS the following simple diet may form a valuable guide to mothers:—

Meal 7.30 *a.m.*—Fine bread sop made with milk; prepared Mellin's Food and bread or oatmeal.

Meal 11 *a.m.*—Drink of milk with Mellin's Food Biscuit softened with milk.

Meal 2 *p.m.*—Bread crumbs or rice, or mealy potato and gravy, or lightly boiled egg, bread and butter.

Meal 5.30 *p.m.*—Bread and milk, or Mellin's Food Biscuit and milk.

Meal 7.30 *p.m.*—Mellin's Food prepared with milk, about 8 ounces.

Children at this age should not be given tea or coffee or stimulants.

From Two Years and Upwards.

Meal 8 *a.m.*—About ten ounces of prepared Mellin's Food, two slices bread and butter, and small cupful of well-cooked oatmeal. Tea and coffee should be avoided.

Meal 12 *noon.*—About three ounces of roast or boiled mutton, chicken, or turkey, mashed potatoes or rice four ounces, and juicy gravy; a slice of bread, and about three tablespoonfuls of custard or rice pudding. Dilute Mellin's Food, prepared with enough salt to make it palatable to drink.

Meal 4 p.m.—About ten ounces of prepared Mellin's Food; two slices of bread and butter.

Meal 8 p.m.—About ten ounces of prepared Mellin's Food, flavoured with chocolate, and a few Mellin's Food Biscuits.

When the milk teeth have made their appearance the child is able to digest some farinaceous food. During the transitional period, when a child is passing from the ordinary Mellin's Food diet, as above described, to a mixed diet, Mellin's Food Biscuits should be given.

Growing children.—Upon the feeding and housing of the child for the first ten years of its life its physical and mental capacity largely depends. During the period of active growth and development of the body a child may be languid, and disinclined to either bodily or mental exertion. This condition often demands food which can be promptly assimilated. Mellin's Food prepared with milk will relieve the languor by supplying nourishment which at once enters the circulation. The directions given here for preparing Mellin's Food need not, as in the case of infants, be followed exactly. *The amount of Mellin's Food may be increased or diminished to suit the taste or needs of the child. And Mellin's Food Biscuits may be freely given, for they are highly nutritious and easily assimilated.*

Dissolve the Mellin's Food in a little hot water and mix it with the milk. Salt if desired.

Mellin's Food . . .	One to two tablespoonfuls;
Milk	One half pint.

One egg; a pinch of salt.

Beat the egg thoroughly and add to the Mellin's Food and milk. Sweeten if desired.

As much of either of this mixture as is desired may be taken midway between meals and at bedtime; or at any time when the need of it is felt. It should be sipped slowly, and it is usually most relished when cold.

The milk used in mixing Mellin's Food should be pure, fresh cow's milk, of good quality. Average milk from a herd of good cows is generally more satisfactory than what is ordinarily known as "one cow's milk." Milk containing a large amount of curd (cheesy milk) should be avoided.

The milk should, as a rule, be boiled, for in India the difficulty of keeping it sweet through the night is very great. Boiling reduces the richness of milk and increases its digestibility. For this reason, therefore, in passing from the plains to a hill station it is advisable to boil the milk for the first few weeks, otherwise the richer milk of the hill-fed cows will be very likely to disagree with the baby. As an alternative to boiling the milk may be scalded by placing a cup of milk in a saucepan of boiling water and leaving it to stand in it without putting it on the fire. The milk may also be kept sweet by placing it on ice or in cold water. The milk should be kept in a covered jar so as to avoid contamination, for it will very quickly absorb odours and impurities.

As pure cow's milk may vary somewhat in its constituents and conditions, it has been found that it is sometimes advisable to *change the source of supply*, milk from one source may be unsuited to the digestive powers of the infant, while that from another source will give entire satisfaction. Milk which shows no impurity by appearance, taste, or chemical analysis, and which agrees perfectly well with an adult, will sometimes disagree seriously with an infant, since the milk from cows varies with different animals and at different times with the same animal; but, on the other hand, the Mellin's Food does not vary; in consequence, any troubles which may arise in this direction will usually disappear at once on changing the milk.

A baby often suffers from thirst; and this may be mistaken for hunger. A little cool diluted milk should be given, a teaspoonful at a time to a very young baby. There will then be much less danger of overfeeding.

Dietary in sickness and convalescence.—The general rules given above are for ordinary healthy children, but it becomes necessary sometimes to make modifications in the dietary of the child in consequence of actual sickness or ill-health. The conditions which are most likely to arise in India necessitating modifications in the preparation of Mellin's Food will be considered separately. In very young babies the irregularities are most likely to declare themselves in the form of constipation, diarrhœa, and vomiting.

Constipation is frequently caused by the inability of the child to properly digest the milk, and therefore a larger proportion of Mellin's Food must be added; in some cases it is advisable to decrease the proportion of milk at the same time. Between the feedings cool water * should be given to the baby, and should be used freely upon the first indication of constipation. Care should be taken to keep the feet and limbs warm.

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* Water should always be first boiled.

It is a bad plan to give strong purgatives for constipation, for they tend to lower the healthy tone of the digestive canal. By slight variations in the proportion of the ingredients of the food, it usually becomes possible to correct this distressing condition. Where such means however, fail, then mild saline laxatives, such as phosphate of soda, carbonate of magnesia, or manna, may be given with advantage.

As a rule, the two chief causes of ill-health during the first few months of a child's life are diarrhœa and constipation. The former in India frequently proves rapidly fatal, and consequently means should be taken to check it.

Diarrhœa and cholera infantum.—A child who is ill with cholera infantum should be placed under the care of a medical man. Where medical aid cannot at once be obtained, a dose of castor oil, followed by a few drops of sal volatile, will be usually found to check the symptoms. A small dose of castor oil given at the early stage of the symptoms of diarrhœa is invaluable. Should these simple remedies fail it may be necessary to give chalk mixture. A band of warm flannel round the abdomen will frequently check diarrhœa; but the best remedies are change of diet and air.

In cases of dysentery and diarrhœa Mellin's Food proves of the highest value, and the following directions are for the preparation of Mellin's Food only in such cases. When a baby, sick with diarrhœa or cholera infantum, or much reduced by digestive disturbance, cannot retain milk upon his stomach, no hope of relief can be entertained until this is excluded from the diet, since it seems at such times to act as an irritant. In such cases Mellin's Food should be prepared with water alone or with barley water, dissolving a tablespoonful of the Food in half a pint of the hot liquid. As thus prepared, it may, and usually should, be given cold; and if the vomiting or purging is severe, a teaspoonful only should be given at a time, repeating it at intervals of ten minutes. When the vomiting and purging have been arrested, the child can be allowed to suck from the bottle. After a couple of days have elapsed without the return of these symptoms a little milk may be cautiously added to the diet; this may be very gradually increased as the child's stomach gains vigour. In the summer-diarrhœa of infants the child may seem to be hungry when, in reality, it is thirsty, and, food being given, his stomach is overtasked and the complaint is aggravated. Water * may be given.

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* Water for drinking purpose must be boiled.

Cold and errors in diet are the common causes of diarrhœa in children, and care should be taken, on the one hand, to shield them from all sudden changes of temperature, and, on the other, to select a proper food, which should be prepared as above described.

Vomiting.—If the prepared food in any case seems to disagree, the mother or nurse should at once satisfy herself whether the fault is with the milk, with the method of preparation of the Food, or the way in which it is given. Sometimes milk from one source disagrees when milk from another agrees perfectly; too large a quantity of the prepared food may have been given at once; the meals may have been too frequently repeated; the milk, originally sweet, may have turned sour from keeping, or be at the point of turning; or the whole secret may lie in a slight uncleanness of the feeding apparatus, which has escaped notice. If the baby cannot retain milk, Mellin's Food dissolved in warm water only should be used for a few days; it is often best to give it cold (never lukewarm), in small amounts frequently repeated. In some cases Mellin's Food dissolved in barley water has given excellent results. As soon as the stomach gains tone a small quantity of milk should be added cautiously until the proper proportions are reached.

Mellin's Food is a great boon to **nursing mothers in India,** especially to those with whom ordinary food does not make up for the drain upon the system, possessing, as it does, satisfying and nourishing properties of a very high order. It is far superior to malt liquors, which are so often resorted to by nursing mothers to increase the flow of milk, since it not only increases the quantity, but also improves the quality of the milk yielded. The mother's strength is sustained under the adverse climatic conditions, and at the same time the child is well nourished. It may be used as directed below, or prepared to suit the taste, the proportion of Mellin's Food being increased or diminished as is found agreeable; it may be taken freely as often as is desired.

Mellin's Food . . .	One or more tablespoonfuls;
Milk	One half pint.

Dissolve the Mellin's Food in the milk; add a little salt if desired. *It is most generally relished cold.* If more agreeable, it may be prepared by dissolving in filtered and boiled water instead of milk.

CHAPTER VII.

THE CLOTHING OF INFANTS.

THE clothing of an infant very materially influences its condition of health, and may very largely determine its whole after-life, and no subject of nursery hygiene requires greater care. Babies are far more susceptible to changes of temperature than adults. Their liability to bodily derangements therefore, in consequence of undue exposure, is far greater than that of adults. The three qualities to be considered in selecting the materials for a baby's clothing are :—1st, **softness**; 2nd, **warmth**; 3rd, **lightness.**

A baby's skin is very tender and easily rubbed or chafed, which makes it necessary that care should be taken to choose those materials for its clothes which will not cause irritation. The clothing should be as light in weight as is compatible with due protection, and should be evenly distributed over the child's body. The sleeves of the dress should be made long and the neck high. The arms, legs, and neck should not be exposed under the mistaken notion that such treatment will make the child hardy. For small children these precautions are very necessary in India, save during the very hot season, on account of the carelessness of ayahs and the changing winds of the climate.

India embraces so great a variety of climate that the following remarks must only be taken as embodying general principles, to be varied in detail with local experience. It is necessary to warn mothers against the evils which arise from a want of protection, on the one hand from the direct action of the sun, and on the other from the influence of night chills or dry winds. The common tendency of mothers in the East is to load the chest and body with too great an amount of clothing. All clothing should be made loose, and if a child be prematurely born, or constitutionally delicate, special care should be devoted to its underclothing, which is best made of light woollen loosely knitted materials. Strings, tapes, and ribbons should be used where possible; but no ordinary pins should be employed in adjusting the clothes, and but few safety pins.

Residence in India, and in tropical countries generally, tends to induce slight delicacies of constitution which render one more susceptible to diseases of all kinds, and this influence is most marked in early infancy. Nurses sometimes object to wrapping up children in India; but the dangers which arise from undue exposure are often greater than in England. The differences of temperature before and after sunset are much more marked and rapid than in England. A chill, which in England would merely lead to a slight cold without any serious consequences, will, on the other hand, in India, invariably lead to the development of more dangerous symptoms; and for this reason **chills should be very carefully avoided.** It is well that young Anglo-Indian mothers should remember that a fall of a few degrees of temperature in the tropics will make a much greater impression than a fall of many degrees in a temperate zone. There is probably no climate that requires so much change of dress as India, and therefore a careful mother will vary her child's costume during the day with the marked changes of temperature.

The baby's first clothes are usually made very long, which practice is both unnecessary and uncomfortable for the child. For the first dress a length of twenty-six to twenty-eight inches is enough, measured from the neck to the hem of the skirt.

The best means for attaining warmth, softness without undue weight, is by employing lightly made woollen materials, such as fine, but not too closely woven, flannel, flannel-gauze, cashmere, and merino. Such fabrics cost little more than cotton or linen in the first place, and are much more durable. By doing away with the foolish and costly process of short-coating, a child may be provided at once with an outfit for its whole infancy.

The washing of woollen materials is troublesome with native servants; but with a little care it may be easily and well done. A mother should see that the *dhobee* adopts the following plan:—The water in which the flannels are put should be warm, *not hot*, and the lather should be prepared beforehand with some good soap—Hudson's extract answers admirably—or pieces of ordinary soap may be cut up small, boiled down with a little water in an old saucepan, and then added to the water in which the clothes are to be washed. Another plan is to add about a tablespoonful of ammonia to each two gallons of water used for washing, by which means it is softened. The clothes should then be lightly and quickly rubbed, either with the hands or on a washing board, until they are quite clean, rinsed in clear warm water, mangled, and allowed to dry quickly.

The number and shape of the various articles of clothing

and the materials of which they are made will, of course, vary with the circumstances of the parents.

The usual outfit for a newborn baby consists of:—

6 shirts;
3 day flannels;
3 night flannels;
6 day dresses;
6 night dresses;
3 flannel binders;
3 dozen diapers;
2 head flannels—1 night, 1 day;
4 pairs wool boots;
1 soft fleecy wool shawl;
1 flannel and 1 mackintosh apron for washing the baby on;
2 or 3 dozen goodries.

Later, some bibs and flannel pilches will be required.

The usual cotton binders, which are often drawn round the child's body as tightly as possible and then stitched, not only make the child uncomfortable, but seriously impede its breathing.

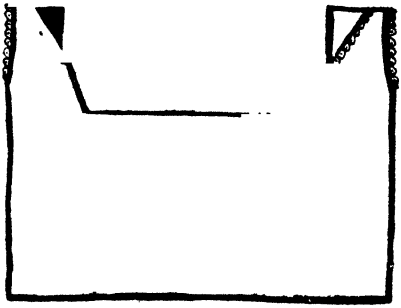


Fig. 21.—Baby's first shirt.

The shirt should be twenty-four inches round, and nine and a quarter deep. It may be made of fine nainsook or embroidery cambric, trimmed with narrow Valenciennes lace, of which one yard and a half will make six shirts; but a better material to use is fine merino vesting, or quite the best plan is to make **them of fine knitted Shetland wool.** The latter plan, of course, necessitates a great deal of labour; but during the later stages of pregnancy, under the influence of the climate of India, absolute rest is necessary, and a young mother will find pleasure and relief in the work. Shirts are sometimes made with a small V gore let in under the arm; but this is quite unnecessary, and the seams prove a source of irritation to the delicate skin of the child.

The binder should be of flannel, five inches broad, and long enough to pass twice round the child's body. The binder should be prepared without hems or turnings, and left with raw edges. It should be fastened with flaps taped at each side to tie across, and the use of pins avoided. When so made and used the binder is elastic, and serves as an efficient support for the abdomen without pressure upon any of the internal organs.

skirt and bodice should be made of Saxony flannel, and it is preferable that it should be made in two parts, so that, should the lower portion become soiled, it may easily be removed without disturbing the rest of the clothing. The bodice should be about the same size as the shirt, save that it must be made to fasten down the front, and the skirt should be about eighteen inches deep when finished. The two portions should be fastened together by means of flat buttons on the bodice, and holes to correspond on the skirt. Some of these garments, for night wear, might be made in one piece.

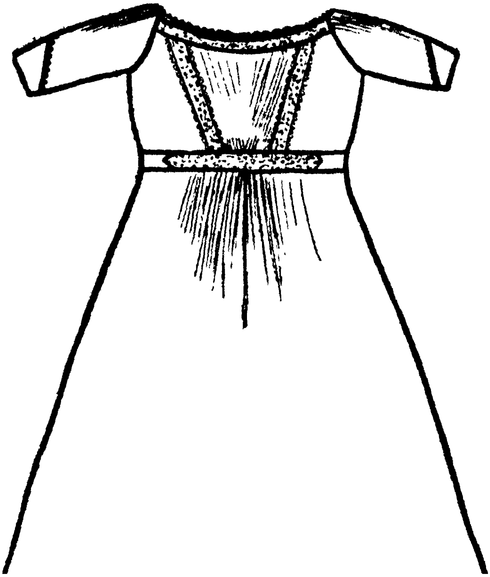


Fig. 22.—The monthly gown or dress.

The dress should be made in one piece from neck to feet, and cannot be too simple, as comfort is essential. Twenty-eight inches will be found long enough from neck to hem, and fifty-two inches round the bottom (see Fig. 22). The sleeve should be cut in one piece, and the extreme length is ten and a half inches, nearly three inches of which folds up at the wrists to form a cuff. They should be cut sloping up, so as to be introduced into the neck, by which means the armhole is larger than usual, and so much easier for the introduction of the arm. The back of the dress should be open from neck to bottom, and the top gathered into a neck-band through which a draw-string should be passed to run round the neck. The front should be gathered about six inches from the neck across the body, and attached to about six inches of the centre of the band. The band itself should be made so as to fit *quite loosely* when brought round the waist.

The material employed may either be fine nainsook, embroidery cambric, or flannel gauze.

The night dress may be of longcloth, trimmed with narrow embroidery or lace, and cut the same shape as that for the day dresses. As soon as the band and night flannel are given up, the child should wear a fine knitted wool vest and a flannel nightdress. In the hotter parts of India, and during the summer in the plains, it might be made of fine gauze flannel, and during the winter and in the hill districts thicker flannel must be employed.

Boots are hardly needed where the clothing is purposely arranged to cover the feet; when, however, some kind of covering for the feet becomes necessary, those are best which are knitted of the finest Shetland wool.

Napkins are a necessary nuisance, and they should be made of some soft absorbent material, such as Turkish towelling. When soiled they should be removed as soon as possible, washed, and dried in the sun. Only one diaper should be used at a time; such a bulky lot of material as two or three diapers not only makes a child uncomfortable by pushing its thighs apart, but tends to alter the shape of its legs.

The goodrie is a small quilted square, from fifteen or eighteen inches wide and twenty-four inches long, upon which it is the practice to carry infants in India. They are constantly being soiled, and are washed and dried daily by the ayah; weekly they should be sent to the dhobi to be thoroughly cleansed.

For outdoor purposes a white Chudda shawl, during the first months of life, serves well as an outer garment. Later a soft thin woollen garment with very loose sleeves should be worn. So long as a child is unable to wear a sun topee, it ought only to be taken out in the early morning or during the late afternoon, after five o'clock in most parts of India. The child should be carried about as little as possible to prevent friction of the arm and undue heating.

CHAPTER VIII.

THE NURSERY AND AYAH.

WE have considered in the preceding chapters the questions of feeding and clothing as being the two most important factors determining the health and well-being of infants. Before passing to the consideration of the minor ailments of childhood we may next refer to the influence of the nursery and nursing upon the health of the child.

The Nursery.—The choice of a room for a nursery in town houses in England becomes a difficult question, but the conditions which are here laid down may be, with little difficulty, complied with in India.

The room selected as **the nursery should be large, well lighted, well ventilated, free from draughts, and not in the neighbourhood** of cesspool, closet, or any other source of unhealthy exhalations. An impure atmosphere tends to lower the tone of health, and not only induces a sickly constitution in the child, but, by reducing the vitality, also causes a susceptibility to all diseases. The rooms of Indian bungalows are usually large and airy, but the bungalows are not always themselves healthily situated. The following simple rules may be borne in mind by young parents when selecting or superintending the building of a bungalow :—

> The site should be dry. Avoid, as you would death, a damp locality. In a town or city carefully ascertain whether or not the dwelling is on "made ground." Avoid it. Avoid ground underlaid with clay, for it will always be damp.
>
> 2. The site should be elevated on a hillside or gentle slope, never in a hollow. The hillside is warmer and drier than the hollow.
>
> 3. The site should not be close to a swamp, slow river, milldam, or land which is overflowed a portion of the year, nor in such a place that the prevailing winds will bring to the house damp air and miasmatic vapours.
>
> 4. In a village or town build on as large a compound as possible, thus securing air and sunlight. Build back from the street, thus avoiding the dust of the dry season and the curious gaze of every passer. Secure a yard in which trees and plants will furnish both shade against the sun for exercise and add to the general healthiness of the site.

5. In the country build the bungalow back from the highway, giving an abundance of room for trees and shrubbery about the house. Do not select a place where your family will be isolated from all social intercourse, so necessary to the health of mind and body.
6. For the aspect, let the house be so placed that it will receive fresh air. Avoid, even if offered rent free, a damp, dark house with no chance of the free air to sweep through it. The living-rooms should always be warmed by the morning sun. If the cold winds from the north and west are severe in the winter in hill districts, they may be broken by a cluster of evergreen trees planted on those sides.
7. The bungalow should always be built so that the ground floor is raised a few steps above the level of the earth. And if one part is raised to a greater extent than the rest in consequence of the slope of the soil, a room **on the higher side should be selected for the nursery.**

A cot should be provided, with a fairly firm horse-hair or grass mattress, protected by a mackintosh sheet, and on no account should the baby be permitted to sleep with the nurse.

The cot should be placed near one side of the room, so as to escape direct draught. A position near the inner wall is preferable, but do not place the bed so that it is exposed to the strong rays of the morning sun, for although sunlight is good, and possesses many hygienic properties, yet the strong glare disturbs the rest and acts injuriously upon the eyesight. It is best to shelter the side of the bed most exposed to air currents by means of a screen. Good ventilation should be secured, but means must be taken to prevent draughts. At night, during the rainy season, the outer shutters should be closed, and in districts of India where the punkah must be employed at night care must be taken that it is not so violently pulled as to produce draughts of night air. The nursery and all the surroundings for the health of the child should be bright, clean, and cheerful; no unnecessary furniture, rugs, curtains, or hangings should be allowed. Although flowers may be permitted in the daytime to beautify the room, they should be removed at night, for the stagnant water and the aroma given off by the plants do not add to the purity of the atmosphere. And the one essential in the matter of air is that it should be as pure as possible, and of a uniform temperature. In the matter of wall covering, wood varnished or painted, or distempered or painted walls, are best. These may be adorned with pretty prints from the home illustrated papers.

The night clothing of the baby should be a long gown of thin flannel with long sleeves and fitting well round the neck; the bed covering may be reduced to a minimum in the hot season, but the lost protection is secured for all parts of the body against chill by such a garment. Children, especially when young, are very apt to be restless during sleep, and to throw off the clothes. A very good plan, therefore, is to make the bed gown long and close it at the bottom, by running a tape, like the mouth of a sack. By this means, even where the bed-clothes are thrown off, the body is protected from draughts. And it is to the chills to which babies are exposed during the sleeping period that much of the delicacy and sickness of Anglo-Indian children may be traced. These precautions with respect to the night-clothes are of the utmost importance during the period of the monsoons. For these conditions to be secured it is absolutely necessary that a **mother should herself superintend the nursery,** and see that the directions which she lays down for the management of her child and its surroundings are followed in every detail. With native servants a mother has to combat against ignorance, prejudice, and carelessness, and she can only hope to obtain the best conditions for her babe by personal care of details. The young Anglo-Indian mother must be prepared to sacrifice a great deal of her time to the care of the nursery and her children if she would have them brought up under the most healthy and favourable conditions. Of course, where a mother has the advantages of a good English nurse a great deal of the responsibility and anxiety is taken from her; but where she has to depend entirely upon native servants, she will, as a rule, find that it is necessary to exercise constant supervision, and watch the treatment of her babe and the general work of the nursery.

Next to a good English nurse ranks, as a rule, the East Indian nurse, and where they have been brought up and trained in European schools they make much better servants than the ordinary ayahs. Nevertheless, **the ayah is the nurse to be found in most Anglo-Indian homes,** and it may not be out of place here to lay down a few rules for the guidance of a young mother in directing **the duties of the ayah.**

Sleep.—A newly born infant sleeps a greater portion of the day, and usually, when healthy, wakes up only for feeding. The amount of sleep required decreases as the age and activity of the child increases, until at the age of one year a child will sleep some fifteen or sixteen hours out of the twenty-four.

Some young children suffer from excessive activity of brain, and are restless, and sleep but little at night. Ayahs are much disposed to administer soothing drugs containing opium or morphia; a mother should therefore guard against this, and should not allow the ayah to administer drugs or medicines of any kind to her child, nor should she employ any of the so-called soothing syrups herself, but where such conditions arise in a child she should call in medical aid. The symptoms of drugging, for which a mother should carefully watch if she has reason to suspect that the child's sleep is other than quite natural, are as follows:—

Heavy sleep. The child if roused dozes off again immediately.

A child under four months will usually not sleep for longer periods than four hours to four hours and a half at a stretch.

The breathing during sleep is irregular and at times scarcely perceptible.

The child on waking is not anxious for food.

The pupils of the eyes become contracted.

The face usually becomes pale during sleep.

Where drugs are employed in small quantities in a short time the digestion is interfered with, the appetite is reduced, constipation is produced, the excreta becomes hard and clay-coloured, and these symptoms are usually followed by pallor, listlessness, feebleness, and general wasting.

Sleeplessness is nearly always due to want of air, exercise, or error in diet, unless, of course, it may be traced to teething troubles, or to the existence of internal worms. A child should therefore be taken into the open air as much as possible. At three months, at least, a child should be taken out twice a day; in the morning say at 6.30 in summer and 7 in winter, and after 5 in the afternoon. But a young babe cannot be kept out more than three hours during the day in any part of India.

Until the child reaches the age of one year he should be allowed to sleep at any time, and it is a great mistake to rouse a child, at this early age, from healthy, natural sleep.

When the babe wakes in the morning the first duty of the ayah is to "hold him out," and the next to give him a bottle of food. Of course, if he is old enough, he will first have his bath.

If during the night he has perspired freely, the whole skin should be rubbed with a soft towel before bathing, care being taken that draughts are avoided. The skin of a baby is very active and very delicate, and is susceptible to changes of temperature. The child should therefore be rapidly sponged with water at about 90° F. [illegible] The [illegible] should be pure and free from alkali, and should not be artificially coloured or perfumed; the colouring and odorous matters so largely employed in preparing toilet soaps are only too frequently the means adopted to mask inferior materials employed in their preparation. These added substances never increase the value of a soap as such, and, on the other hand, often act as irritants to the delicate skins of children. After the bath the skin should be carefully dried with a soft towel, and some good dusting powder should be dabbed into the folds of the arm-pits, groins, and buttocks with a soft puff. One of the simplest and cheapest dusting powders is made from a mixture of six ounces of Brown and Polson's Corn Flour and one ounce of borax.

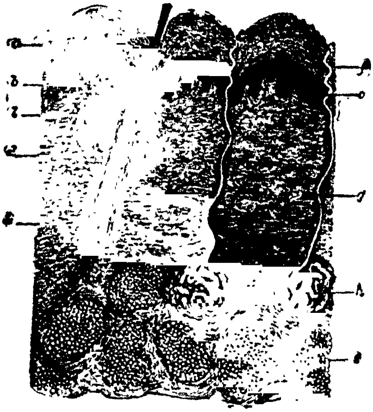


Fig. 23.—Section through the skin, very highly magnified, showing the sweat glands, root of a hair, and sebaceous or fat gland of hair.

Directly the bath is over the child should be dressed for going out, and given the early morning bottle of food. The clothes to be worn should be looked out over night.

Before taking the child out the ayah should open all windows, and put the mattress, bed-clothes, and mackintosh to air, and place the empty food bottle and teat in filtered water containing a pinch of borax to soak. The baby would, in most parts of India, be ready to go out at 6.30 or 7 o'clock.

The mother should prepare a second bottle of food for the child's return, about 8 or 8.30, or, where a second ayah is kept, of course this duty would devolve upon her.

The feeding-bottle.—For successful hand-feeding the food must be given in a proper manner, and therefore care must be taken to select a suitable feeding-bottle. The shape must be such that the bottle can be quickly, easily, and thoroughly cleaned. Avoid bottles every part of which is not readily accessible. After each meal the feeding-bottle must be washed and brushed out thoroughly, and then kept in cold water until needed. The best plan is to have two bottles, and several teats, to be used alternately.

The fittings should be as few and simple as possible. It is almost impossible to keep a long rubber tube sweet. A rubber nipple stretched over the mouth of the bottle is best. It should be of such size and shape (conical is the best) that it may be readily turned inside out; the opening in the top must be of such size that the milk will not flow through without suction, since if it is too large the child will take food too fast, and this will frequently give rise to sickness—that known as the leech bite is considered the best. After each meal the nipple should be thoroughly washed and brushed on the outside, then turned inside out and the inside similarly cleaned. Young mothers will find it better to have two bottles in use, one of which should be in soak.

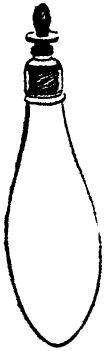


Fig. 24. — Feeding bottle—soda-water shape.

Both bottle and nipple must be kept scrupulously clean. To the disregard of this, however slight, may be traced, without doubt, a large proportion of the illnesses of children. The sense of smell will sufficiently indicate whether the bottle and its fittings are in a proper condition.

The feeding-bottle tube, with teats, should be thoroughly well washed with water made alkaline by dissolving in a pint of water as much bicarbonate of soda or borax as will lie on a rupee. The bottle and teats, when not in use, should be allowed to lie in such water in a cool place.

The best pattern for the feeding-bottle is that known as the soda-water shape (see Fig. 24), in which there is one opening only, and that in the neck, which is grooved on the inside for a screwed glass top. On this is fixed the teat. This form of bottle possesses the following advantages—it is easy to keep clean, and the child must be held in the ayah's arms during feeding, which is the proper position.

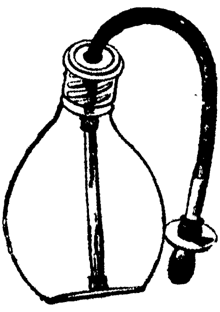


Fig 25.—Alexandra Feeding-bottle.

The infant's feeding-bottle generally met with in India is that known as the Alexandra (see Fig. 25). This form of bottle has a china or glass screw top, to which an india-rubber tube ending in the teat is attached on the outside. The tube passes through the screw top and ends in the bottle in a glass tube. The teat has a small ivory collar attached to it so as to prevent the infant from sucking off and swallowing the teat. This kind of bottle is difficult to keep clean; and it has another disadvantage, for it may be placed in the cot and the baby allowed to feed itself, and this plan ayahs are only too ready to adopt. But an infant left to himself bolts his food, and this induces vomiting, diarrhœa, wind, and fretfulness. Bottles which necessitate the use of corks should never be employed, for the cork is very absorbent, and they are most liable to taint the milk.

The following rules ought to be attended to in the case of hand-fed children :—

1. The bottle should be taken away as soon as the contents are finished.
2. If the child refuses to finish the bottle, it should be taken away at once.
3. If any food remains at the end of the meal it should be thrown away, and on no account warmed up for the next meal.

On the return of the ayah or nurse about 8 or 8.30, the child should be held out and then fed.

After breakfast the child should be held out again, or placed on the "stool" until the bowels are moved. Restlessness may be prevented by toys or picture-books, when the baby is old enough to be interested in such things.

At 11 or 12 o'clock the infant should be completely undressed, and placed in a darkened room for midday sleep for from two to three hours.

On waking the child should be dressed in clean clothes and fed again about 1 or 1.30.

The next meal should be given about 4.30 to 5.

The child, if old enough, may then be dressed for going out, and taken out for an hour.

At 7 o'clock the evening meal should be given before going to bed. Many young Anglo-Indian mothers make the mistake of supposing that children must be put to bed as early in India as in England, forgetful of the fact that if a child sleeps for two or three hours during the heat of the day it does not require the same amount of sleep at night. In most parts of India a child cannot go out in the afternoon until after 5 o'clock, and as its age increases it becomes more and more necessary that it should stay out as long as possible, usually until about 6.30 or 7 o'clock.

Of course, the hours will vary somewhat in different stations, but these simple rules hold good over vast areas in India.

When the child is put to rest, care must be taken that the blankets, mattress, sheets, etc., are clean, sweet, and perfectly dry.

A good plan adopted by many experienced Anglo-Indian mothers is to place the child on a mattress upon the floor. The great advantage of this plan is that the infant may be placed with ease in any part of the house to secure coolness. The infant should always when sleeping **be protected from mosquitoes** by a light mosquito net. The best forms are shaped somewhat like a dish cover, and are made of light cane and gauze. By this means protection is provided and ventilation not to any extent interfered with.

When the child is out it is necessary that he should be sheltered from the direct sun heat, and as soon as he is old enough a sun topee should be worn.

A mother should know exactly where an ayah takes her children, and should see that the directions which she gives on this subject are followed in detail.

The ayah should not be permitted to give native sweetmeats or any other compounds of sugar to the children in her charge.

The mother should insist on great personal cleanliness on the part of the ayah. She should be made to take a daily bath, and to wear clean clothes.

CHAPTER IX.

TEETHING.

THE teething period is usually a trying time for the mother and child, and complications which arise during teething often lead to serious ailments. Not that these ailments should be considered as caused by teething, but as rather due to the unstable condition of the economy which is produced at this stage of life. This is a period of great activity in the growth and development of a child, and the balance of health is frequently upset and ailments set up. It is this unbalanced condition which causes the extreme susceptibility to ailments at the teething period.

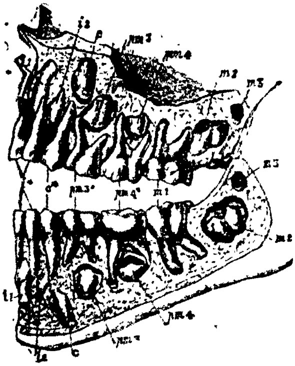


Fig. 26.—Showing first or milk teeth and second set of teeth developing in the jaw.

The age at which a child cuts its first tooth varies in individual cases; the majority of children begin to cut their teeth when from four to six months of age. Some very vigorous and forward children may begin as early as three months, and in those of weakly constitution teething may be delayed until the eleventh or even twelfth month. Teething seems to be less painful and more rapid in India than in England; but, on the other hand, the attendant disturbances of health and accompanying ailments need greater care and attention than in England.

In ordinary cases the child grows irritable, refuses its food at the regular times, and becomes feverish at night, and a young mother may imagine that the baby is going to be very ill; but directly the teeth appear these symptoms pass off.

At the age of two and a half years a child, as a rule, has his first complete set of teeth; these are known as the **twenty**

milk teeth. As a rule, these teeth are cut in the following order in each jaw:—

2 Central Incisors, or Front Cutting Teeth	6th month.
2 Lateral Incisors, or Outside Cutting Teeth	9th ,,
2 Canine, Dog, or Eye Teeth	18th ,,
2 First Molars, or Lateral Grinders	12th ,,
2 Second Molars, or Posterior Grinders	24th ,,

Of these the teeth in the lower jaw usually make their appearance first, and the corresponding teeth in the upper jaw soon follow the development of those below. The teeth which give the greatest trouble to the child are the second molars, which are usually cut about the end of the second year.

The second set, or **permanent teeth**, begin to make their appearance about the eighth year.

Whilst a child is teething several symptoms occur, none of which are dangerous in themselves, but if neglected they may lead to serious after-results.

For some few weeks before the appearance of any teeth the child dribbles at the mouth, the eyes water, it suffers from thirst, diarrhœa, cough, and often from fever. Where the teeth come in rapid succession the symptoms are often more severe, attended by convulsions, inveterate vomiting, squinting, ear-ache, and various forms of skin rashes.

Many of these symptoms are merely the result of the nervous irritation set up during the teething period, and unless the symptoms are severe, medical aid is unnecessary.

Dribbling during teething is a good sign, and as a rule the less painful and irritating the cutting of teeth to the child, the more marked the dribbling becomes.

Fresh air and exercise, warm baths at night, the head kept clean and cool, and plenty of proper food, go a long way towards making dentition painless for the child, and reducing the anxiety of the mother.

It is a good plan to give the infant an ivory ring or hard rubber pad to rub its gums with and to bite.

In cases of cough during teething, a teaspoonful of glycerine should be given two or three times a day.

The action of the bowels should be attended to, and regular normal excretion should be maintained by occasional doses of fluid magnesia. Sometimes tooth cough is attended by marked constipation; in such cases doses of castor-oil emulsion should be given, prepared as directed on page 67.

Should the child suffer from sickness, the milk should be diluted with lime-water, or a pinch of bicarbonate of potash may be added to each bottle.

Convulsive symptoms should be immediately carefully attended to, for infantile convulsions not infrequently lay the foundation of abnormal nervous conditions, which lead to epilepsy in after life. Cooling, mildly aperient medicines should be given, and if the symptoms do not disappear, medical aid must be sought.

When a fit of convulsions comes on the head should be sponged with cold water, and the child should be placed bodily in a bath of warm water at about blood heat—viz., 98° Fahrenheit. After removal from the bath the child must be wiped with a soft towel and placed in warm blankets, the head being kept cool.

Where dentition is painful and the gums become swollen and inflamed, the child will shrink or cry when the gums are touched with the finger, and in such cases it is advisable to have the gums lanced. When dentition is normal and easy, the gentle friction of the gums with the finger is soothing to the child.

See that the ayah does not administer any drug or soothing syrup. Opium and mixtures containing opium and Indian hemp are frequently resorted to, and a mother should carefully guard against their use in any form.

CHAPTER X.

VACCINATION.

VACCINATION is the operation by which an infant or adult is inoculated with a material which is produced in cow-pox. The disease known as cow-pox is a peculiar complaint which affects the teats of cows, and in the early history of vaccination it was noticed that those persons who were in the habit of milking cows so affected secured immunity from ordinary small-pox. These observations led Jenner to the idea of introducing some of the fluid, produced in the eruptions present in cow-pox, beneath the human skin, with the object of affording protection against small-pox. It was found that the two diseases, cow-pox and human small-pox, were antagonistic to each other ; that the vaccinia of the former, introduced beneath the skin, produced such changes in the body as to sterilise the blood against the human disease, small-pox. It appears that **the efficiency of the vaccination** does not in all cases remain through life, but by re-vaccination complete immunity from the loathsome disease is secured. Even where a vaccinated person does take small-pox the disease runs usually a comparatively mild and simple course. In England, and in European countries generally, the disease is so under control that one rarely meets a patient marked by small-pox. But in India, and the East generally, where vaccination is by no means general, a large percentage of the natives are deeply scarred and pitted with the disease, and also a large number die annually.

The liability to small-pox is therefore far greater in India than in England, in consequence of its prevalence among the native peoples of all castes. Every Anglo-Indian mother therefore should seek at the proper time protection for her child from this vile disease. The actual operation is a simple one, and if due precautions are taken by the operator, and cleanliness and care observed by the ayah and mother, no ill effects should arise. Nevertheless, slight disturbances are produced in the health of the child, which will cause the mother some anxiety at this period.

The time at which vaccination may best be performed will vary under different circumstances, but in all ordinary cases the operation should be performed **between the ages of six weeks and three months.** By the vaccination laws of Great Britain and Ireland every infant must be vaccinated before it is three months old, and this is a very good rule, for the slight disturbances which may be produced are got over before the teething period commences.

In India, however, where the child is healthy, it is advisable to have the operation performed as early as possible, save that it is best to avoid the rainy period of the year, or monsoon season, for at this time of the year complications are most likely to arise.

When the operation has been performed no special care is required, save the precaution that the inoculated part shall be kept scrupulously free from irritation. Rubbing, scratching, and dirt must be carefully avoided. For the first eight days after vaccination the part should need only the ordinary shield against scratching. About two days after the operation the punctures made will become somewhat swollen and hard; on the fifth day a small circular vesicle, with raised edges and a depressed centre, is seen. By the eighth day this vesicle becomes distended with a clear fluid, and is either pearl-coloured or somewhat yellow. From the eighth to the tenth day a small inflamed ring makes its appearance round the base of the vesicle, and this extends for some two or three inches round the central spot. About the tenth day, if all goes well, the swelling begins to disappear, and the little vesicle turns brown and becomes scaly, forming a scab which drops off about the twenty-first day, leaving a permanent discoidal scar. If the operation does not follow this course, especially if the vesicle appears earlier than the fifth day and the inflamed ring is not present, the vaccination must be repeated.

Treatment of the child after vaccination.—The most important point is to keep the arm free from all kinds of irritation. The dress sleeve should be loosened. This is best done by opening the seams of the sleeves of the dresses to be used, and sewing in tapes, which may be employed to fix the sleeve as loosely as desired.

A dusting powder prepared from equal parts of oxide of zinc and boracic acid will be found most useful in subduing the heat of the spots.

Where the irritation is more marked relief may be afforded by loosely binding up the part with pieces of old soft linen, which are kept moist by dipping them in a solution of borax in filtered water. Where the spots become very much inflamed and the child suffers considerable pain, hot fomentation may be applied. But unless it is absolutely necessary to resort to this mode of relief, moist applications should be avoided, as they tend to soften the heads of the vesicles and prevent them from drying.

Source of vaccination material.—This is a matter about which many young mothers in India give themselves unnecessary anxiety. The medical attendant is most capable of deciding. Mothers and friends generally only too often are led by sentiment or prejudice. The medical man is best able to judge of the healthiness and suitability of a child. In European countries calf vaccine lymph is often used for the vaccination of children, but in England many practical difficulties exist in the way of the general adoption of this plan; in India these difficulties are very considerably increased. In Bombay and other large cities vaccination is generally performed direct from the calf. Outside the large cities of India, therefore, the origin of vaccination material usually resolves itself into the question of white child or native. A mother should understand that vaccination is just as efficient from a healthy native child as from a white one. The question of healthiness and suitability is one for the medical man, and a mother, having selected with care her medical adviser, must trust to his knowledge and skill. Remember that it is against the interests of any medical practitioner to vaccinate from, or recommend vaccination from, a child which he knows to be unhealthy. All that a mother can do is to learn as far as she can the antecedents of the child from whom it is proposed to vaccinate her infant, and ascertain that the medical man is informed of the same.

In the preceding lines we have dealt with the objects and methods of vaccination of Anglo-Indian children; but while an Anglo-Indian mother, as a rule, knows something of the advantages of this preventative measure, the same is not true of the bulk of the natives.

In spite of the enormous amount of good hygienic work which has been done by the Zenana Missions, and the improvements in sanitary education brought about by the National Indian Association, the progress is but slow, and much remains to be done to educate the masses in the advantages of the simplest matters of hygiene.

CHAPTER XI.

MINOR AILMENTS.

CONSTIPATION or Costiveness is the condition in which the motions are too hard and are often changed in colour. Many young infants in India suffer from this ailment, yet few mothers treat the matter with the serious attention it deserves; and this neglect is probably chiefly due to ignorance of the causes which are at work producing the same. The conditions which give rise to these distressing symptoms in infants may be classified under the following heads:—

Firstly. Where the child is being fed from the breast and constipation arises, in most cases it will be found that the mother's health is not right, and a little attention to the matter of healthy action of her bowels will lead to the disappearance of the symptoms in the baby. The remedial measures as far as the mother is concerned lie in the direction of more exercise, increased vegetable food, and occasional doses of saline beverages.

Secondly. In the large majority of cases of artificially fed babies, constipation makes its appearance during the first few weeks of life in consequence of the **use of improper artificial foods.** Farinaceous foods act as irritants to the bowels; in such cases constipation is frequently associated with short and intermittent attacks of very offensive diarrhœa. *The child should, in such a case, at once be placed upon a diet of Mellin's Food,* prepared and employed as directed on p. 42, and the symptoms will in most cases disappear. Should, however, the constipation prove persistent, the following remedy should be adopted:—Well mix with the bottle of food two or three times in each twenty-four hours a pinch of phosphate of soda.

More marked cases of constipation after the first few weeks of life may usually be traced to error in diet, such as the **use of rich cow's milk and farinaceous foods.** A change of diet will usually remove the conditions, and food prepared and employed as directed on p. 42 will establish healthy action of the digestive canal. Where the symptoms are very pronounced an ordinary aperient may be used—castor oil is one of the best, given in doses of half to two teaspoonfuls. It should be given plain and followed by some warm food.

Much may be done to cure constipation by care in inducing regular habits both in feeding and excretion. A baby should be fed at regular intervals and held out at the same time each day. A child's bowels for the first six months ought to be opened two to four at least, and not more than five times in the twenty-four hours. The excreta ought to be neither too hard nor too fluid, and they should be of a bright yellowish-brown colour. The quantity of urine passed by an infant is proportionally greater than that of an adult. It should be clear and of a pale straw colour, not turbid or cloudy.

Thirdly. Chills frequently give rise to constipation. This form of reduced activity of the bowels is very common in India among weakly children; it is usually accompanied by loss of appetite and the passing of solid clay-coloured or pale motions. The best remedial measures in such cases lie in the direction of—

(*a*) *Change of diet. Dilute Mellin's Food.*

(*b*) *Hot fomentations over the belly and gentle rubbing.*

(*c*) *Warm clothing and protection from draughts.*

Fourthly. Another form of infantile constipation extremely common in India is due to a want of muscular tone, or weakness of the muscular coats of the digestive canal. The employment of abdominal friction coupled with a liberal diet of Mellin's Food, prepared as directed upon p. 42, will usually remove the symptoms at once.

If the motions are very solid and cause pain, the abdomen should be rubbed with the hand, or with some oily substance, such as ordinary salad oil. The friction should begin at the right lower portion of the abdomen and pass upward and to the left down and back again in a somewhat elliptical fashion. It should be continued slowly, gently, but firmly for ten to fifteen minutes.

As the child grows older, in India a plantain mashed up in milk with a small quantity of Mellin's Food given before breakfast will usually rectify the sluggish action of the bowels.

Diarrhœa.—Diarrhœa is one of the most serious ailments that a baby can have, and unless it is of a very mild character and the child only slightly out of health, the medical attendant should be sent for. In India it may be regarded as perhaps the most serious form of illness an infant is liable to.

The first form, or simple diarrhœa, is generally caused by unsuitable food, and if the baby is breast fed, then attention should be directed to the mother's health. If, on the other hand, the child is artificially fed, then in nine cases out of ten it will be found that the distressing symptoms arise from one of two causes :—

(*a*) *The use of farinaceous food.*
(*b*) *Improper goat's or cow's milk.*

A healthy baby for the first six months of its life should have from two to four motions a day, and the excreta should be of a golden yellow colour, and nearly devoid of odour, or at most only slightly faint. Above this age a child should have two to three motions in twenty-four hours only; any greater number than this shows a tendency to diarrhœa. But, at the same time, if the baby does not refuse food, or otherwise seem unwell, it would not be advisable to check the activity of the digestive organs. But if the motions become more frequent, being passed immediately after food is taken, and if they are watery, slimy, or greenish in appearance, then it is pretty certain that something is seriously wrong. The causes which give rise to these conditions should be at once removed. For farinaceous food Mellin's Food should be at once substituted, and **goat's milk should be steadily avoided.** The food should be given cooler than usual, and greater care should be exercised in the use of **filtered water** and **clean bottles.**

The second form of diarrhœa commonly seen in babies is marked by the rapid passage of the food, which is excreted often apparently unchanged, in curd-like masses. The child has frequent attacks of sickness, and suffers from violent griping pains. This condition is usually set up by the irritation caused by improper food or by exposure to cold. In the early stages a very small dose of castor oil, given in the form of an emulsion, is very helpful to carry off the irritation. The emulsion may be made by mixing three drachms each of gum arabic and loaf sugar, to these add two drops of oil of peppermint and six drachms of water; rub the whole thoroughly up in a mortar, add gradually an ounce of castor oil, and just enough water to make the whole measure four ounces. The whole should be well shaken, and of this emulsion one-half to one teaspoonful should be given every four to six hours.

The third form is inflammatory diarrhœa, or dysentery. The object of the mother should be to establish **safeguards**

against this complaint by the **study and practice of hygienic conditions.** The questions of treatment and cure lie beyond the scope of this little work. Preventative measures lie chiefly in the direction of attention to food and clothing.

The symptoms of dysentery are fever, much looseness of the bowels with straining, the passage of viscid or slimy motions, charged with much mucus and, in the later stages, blood; the griping is very marked, and the straining violent. The infant rapidly loses flesh, becomes pale and exhausted. This disease takes but a few days to reduce even a robust and vigorous child to an emaciated condition. A warm bath is always soothing, and often does good, and in any case the child should be kept warm, and sleep induced. A favourite remedy is white of egg beaten up in milk or water; this is nourishing, and somewhat binding in its action. The medical man should be consulted as soon as possible.

Vomiting.—A child's stomach is very small; it holds only about a wineglassful. A baby often sucks its food very vigorously, and thus rapidly takes in more than enough to fill its little stomach; so it returns the excess by what is known as "posseting"—that is, from time to time a small quantity of food slowly trickles from the corners of the child's mouth. When this condition arises it is only necessary that the baby should be kept quite still after feeding.

In cases of true vomiting, attended with more or less effort and retching, some errors in diet are indicated. The causes usually fall under the heads:—

1. *Too frequent feeding;*
2. *Improper foods;*
3. *Rich curdy cow's milk.*

In breast-fed children vomiting is due in most cases to the breast being given too frequently, or to some weakness in the health of the mother. The period between meals should be lengthened, farinaceous foods should be rejected, the cow's milk should be examined, the mother's health should be attended to. Where the vomiting becomes persistent medical aid should be obtained. In any case, all starchy foods should be abandoned, and Mellin's Food, prepared as directed on p. 44, should be substituted.

Flatulence is closely connected with indigestion, and although quite without danger, it often causes the child considerable pain. Complaints have been made that in India the carelessness and ignorance of ayahs has much to answer for in this matter. It is asserted that they frequently allow babies to suck the tubes of empty feeding-bottles, and often bind their little charges too tightly, both of which would tend to induce flatulence. When slight, the child may be laid on its belly or back and gently but firmly rubbed; a warm bath, too, proves in most cases very efficacious. A change of diet and attention to the points mentioned above will usually be followed at once by disappearance of the symptoms.

Gripings.—The symptoms are violent screaming without any apparent cause; the legs are drawn up, the motions are slimy and usually greenish in colour. In breast-fed children the cause of this griping is frequently to be found in some errors in the dietary of the mother. **A mother's food at the nursing periods should be simple and nutritious,** without any great variations.

In the case of artificially fed children carelessness on the part of the ayah in preparing the food—such as the use of sour milk, or of a bottle which has been but imperfectly cleaned—is a frequent cause of stomach-ache.

To keep her baby well a mother should never allow a bottle or part of a meal to be kept from one feeding time to the next, but the bottle should be emptied at once at the end of the meal, and then placed in water to soak. The tube, nipple, and stopper should be washed carefully, and then also placed in water to soak. The smallest quantity of soured milk or food left in a bottle is enough to upset the baby, and in India milk will keep sweet but for a very short time. Great care should therefore be exercised in this matter.

In cases where griping arises from overfeeding, then the best remedy is a dose of castor oil.

Protrusion of the Bowel may be caused either by constipation or diarrhœa. The bowel comes down through the anus, forming a reddish swelling which may be no larger than a small nutmeg, or quite as large as a pigeon's egg; it may bleed slightly, and causes in any case a great deal of pain. To return the bowel press up firmly by means of a sponge which has been wrung out in cold water. When the bowel has come down once it is always liable to do so again; care should therefore be exercised over the baby every time it has a motion. Any tendency to constipation or diarrhœa should be at once removed, and straining should be prevented. A cold sponge bath every morning will help to strengthen the child, and bathing the parts with cold water after the bowels have acted improves the muscular tone and serves as a preventative measure.

Thrush, also known as *white mouth*, is a peculiar form of inflammation of the lining membrane of the mouth, which frequently gives trouble to the young mother in India.

The condition seems to make its appearance more particularly in hand-fed babies. The signs of thrush are numerous irregular, roundish, white specks on the inner surfaces of the lips, gums, palate, and cheeks. Each little spot is surrounded by a deep reddish space, and is so tender as to cause great pain in swallowing. The mouth is usually very hot and painful, and the child experiences such difficulty in suckling that it refuses the breast or bottle. These symptoms are usually accompanied by a certain amount of redness and soreness between the legs.

The spots in thrush are really due to the growth on the membranes of a lowly and minute vegetable fungus. This organism grows freely in milk which has undergone decomposition, and it is probably caused by a want of scrupulous cleanliness. The fungus will grow in the cracks, fissures, and crevices of feeding bottles, and other utensils which have contained milk. It is most prevalent during the hot season; for heat favours acid changes of milk, and so stimulates the growth of this little fungus.

Treatment.—After a meal the child's mouth should be wiped out, and all fragments of food removed, with warm water in which a pinch of carbonate of soda has been dissolved. The mouth should then be cleansed by means of a camel-hair brush or soft linen soaked in a mixture of borax and glycerine.

When thrush has declared itself all milk must be carefully boiled, and a few grains of carbonate of soda or carbonate of potash added to each meal. Where the symptoms are accompanied by vomiting it may become necessary to substitute beef-tea or chicken broth or barley water for milk.

Most absolute cleanliness must be enforced, as far as the feeding-bottle and teats are concerned (see p. 56). If the condition of the child does not improve in two or three days, medical aid should be called.

Croup.—This disease is entirely confined to very young children. The term is somewhat loosely employed by mothers and nurses to include a large group of symptoms occurring in young children. The symptoms which arise in croup are due to inflammatory changes which take place in the lining membrane of the windpipe.

What is known as "false croup" usually begins at night, the child waking up and catching its breath, and apparently on the verge of choking. These symptoms are most likely to appear among badly fed infants living in insanitary surroundings. An attack of true croup usually begins like a common cold, with slight feverishness, hoarseness, drowsiness, and running at the eyes and nose.

The best treatment for these attacks is a hot bath, and to induce sickness by tickling the back of the throat with a small brush or feather, or by passing the finger into the back of the throat. Exercise greater attention in the matter of food, times of feeding, and regularity of action of bowels.

Child Crowing.—These attacks are very similar in character to false croup, and are common during the teething period. An infant, apparently in perfect health, is seized with a spasm, and the breathing is for a few moments completely arrested. As the spasm passes off and respiration is renewed, the breath is drawn in with a crowing sound very like that produced in false croup. When an attack occurs, turning the child over on its face will often cut short the spasm, or a hot sponge on the throat, cold water dashed in the face, and the free use of smelling salts must be resorted to. General preventative measures lie in the direction of improvement of the general health, exercise in the open air, wholesome easily digested food, and attention to the regular action of the bowels. A medical man should be consulted as soon as possible.

The previous pages have been devoted to the consideration of some of the chief causes and treatment of minor ailments of children, but since the health of parents influences the health of their offspring, the enormous importance of the study of hygiene in India must be apparent to the reader.

Dr. C. Theodore Williams, in a lecture recently delivered before the Sanitary Institute in London, says:—

"**The effect of great heat on different organs of the body** is as follows: In the case of the lungs it reduces the number of respirations from 16, the standard in temperate climes, to 12·74 in the tropics, accompanied by a slight spirometric increase, but not enough to account for the decreased number of respirations, and so the respiratory function is diminished

8·45 per cent. The water exhaled from the lungs is reduced, and the observations of Parkes and Francis show that the lungs of Europeans dying in India are lighter than the European standard after death, proving that these organs, being brought less into physiological activity, diminished in size.

"The heart's action does not appear to be materially quickened or the pulse rate increased in the tropics, but the powers of digestion are weakened, the appetite fails, and the liver becomes congested, and tends either to tissue induration or abscess. The urine is lessened in amount and the urea reduced, possibly from the smaller amount of animal food consumed. The skin acts freely, and its secretion is stated to increase 24 per cent. in the tropics. The nervous system is depressed, and sleep is not so sound as in temperate or cold climates.

"**Protracted residence in hot countries** induces further deterioration in Europeans, impairing the functions of digestion, assimilation, and circulation, and hence the power of making healthy tissue; the tint of the skin and the colour of the conjunctivæ, also the expression of premature age, proclaim the length of an European's residence in the tropics. European children demonstrate most forcibly the unfavourable effects of hot climates, and in India it is generally thought desirable to bring them at any early age to a cold climate like that of this country to escape the effect of the tropical heat, and few sights are more pleasing than to see these puny, pallid, skinny, fretful little ones converted, by British food and British meteorology, into fat and happy English children.

"The most obvious effect, however, of great heat is **sunstroke**, which occasionally occurs in temperate as well as tropical climates, and though principally due to exposure to the solar rays, according to Sir Joseph Fayrer, happens frequently to people in houses, barracks, and tents, and not only when they are exposed to sunheat; it may occur by night as well as by day. The subjects of a sunstroke are generally those debilitated by disordered health, dissipation, or over-fatigue.

"According to Fayrer there are three varieties of sunstroke, each characterised by a certain group of symptoms:—

"*The first showing itself in exhaustion and failure of heart's action;*

"*The second in a condition of shock in which the nerve centres, and especially the respiratory nerve centre, become implicated, causing rapid failure of respiration and circulation;*

"*The chief feature of the third is intense pyrexia, due to vaso-motor paralysis and to the nervous centres being over-stimulated, and then exhausted, by the action of heat on the body generally.*

"From the first form recovery is frequent, but the second is far more serious, and is generally due to the direct action of the sun's rays on the head and spine. The brain and nerve centres, including the respiratory nerve centre, are overwhelmed by the sudden rise of temperature, respiration and circulation fail, and the heart is found contracted after death. The symptoms of this form are generally those of violent injury to the nerve centres, unconsciousness, cold skin, feeble pulse, and death from rapid failure of respiration and circulation.

"The third form, the so-called 'heat fever,' is an intense state of feverishness, the effect of heat on the nerve centres, and through them on the vaso-motor system, resulting in the raising of the body temperature to as high as 108° or 110° Fahr., or even higher, by heat—solar or artificial. This is the form which comes on at night or in the shade, if the temperature be high, and chiefly affects those exhausted by dissipation, fatigue, or overcrowding. Sir Joseph Fayrer teaches us that all the nerve centres suffer from over-stimulation, followed by exhaustion. Here is dyspnœa of a hurried, gasping kind, great restlessness, thirst, frequent micturition, and pungent heat of skin, which is sometimes dry and sometimes moist. The pulse varies from full and laboured to quick and jerking; the face, head, and neck are congested to lividity; the pupils, at first contracted, may dilate before death. Delirious convulsions, often epileptiform, coma, relaxation of the sphincters, and suppression of urine precede the end, but not infrequently partial recovery takes place, to be followed later by relapse and death. The mortality from sunstroke is between 40 and 50 per cent., but of those who recover many are permanently injured, either in brain power or in general health; and we find as a result impairment of memory, nervous irritability, headache and even epilepsy, partial paraplegia, partial or complete blindness, and extreme intolerance of heat, and especially of the sun's rays.

"There are, however, cases of recovery from sunstroke, especially when contracted in temperate climates, which are either complete or present less serious lesions than the above. In fatal cases, after death the lungs are found deeply congested, the heart firmly contracted, the venous system gorged, and the body marked by petechiæ. The blood is more fluid than usual, and acid in reaction; the globules have less tendency than usual to form rouleaux, and are deficient in oxygen. The body, after death, for some time retains a high temperature, and the viscera, when first exposed, feel pungently hot, and, when incised, drip dark blood. The brain and the membranes are intensely congested, and there are sometimes serious effusions into the ventricles or hæmorrhages into the brain substance. The cause of death is generally asphyxia, but apoplexy is occasionally found."

Of the **diseases prevailing in hot climates**, and apparently dependent for such prevalence on the special conditions of those climates, it will be noted that dysentery, and its frequent companion, which is also not rarely its sequela, liver disease, form part of the group. A map of the geographical distribution of these diseases shows that liver disease is confined to hot countries, and does not largely overstep the limits of the tropics; whereas dysentery has a somewhat wide range, but prevails with far greater virulence in the tropics than in subtropical and temperate regions. Fayrer shows that at Calcutta the deaths from dysentery and diarrhœa amounted in one year to 1,516, and that the mortality from these causes was highest in January (243 deaths) and lowest in May (85 deaths).

Dysentery is often attributable to drinking impure water and to insanitary surroundings, as well as to malaria. Some cases appear to arise from sudden meteorological changes, such as from hot to cold and from dry to wet weather. All the causation of this disease seems to be largely governed by the influence of climate, and hence its greater prevalence in hot climates compared with cold.

Liver disease in India was attributed by the late Professor Parkes to errors of diet on the part of Europeans in a hot country; and probably there is truth in this, but it can hardly account for the extensive mortality among Hindoos, Mahommedans, and other natives from this cause.

With regard to the introduction of preventative measures among the native population, Surgeon-General Sir William

Moore says: "Perhaps the greatest difficulties we have to contend with are found in the internal social life of the people; for while there may be, and is, a certain amount of authoritative interference outside, it cannot be extended inside houses, or to the personal hygiene of the people."

The debilitated condition to which mothers, and indeed all Europeans, are often reduced by the influence of climate, requires to be combated by tonics. This lassitude is often accompanied by sluggishness of the liver and intestinal system, loss of appetite, and an anæmic pallor of the mouth and lips. What is wanted is an active tonic which will permeate the system and act as a spur to the functional muscles and nerves. One of the best remedies of the kind we now have is the preparation of Chiretta, made by Kemp, of Kensington, formerly of Bombay. This is a kind of depurated extract of the well-known Indian drug, freed from all counteracting principles such as tannin, and of a uniform concentrated strength. Its effects in counteracting the pernicious influence of a tropical climate are remarkable. The same may be said of it with regard to jungle fevers and complaints known as "malarial." In debility and anæmia of children out of infancy this remedy is excellent, the only drawback in such cases being its bitter taste. Mr. Kemp informs the writer that, although he is the only maker, his "Chirata Tonic" and "Chirata Liquida Kemp" may be obtained through any London agents.

CHAPTER XII.

WHAT TO DO IN EMERGENCIES?

IN the preceding pages some of the more important conditions regulating the health of babies have been explained, and where possible simple instructions have been given as to the manner in which the healthy activity of the various organs may be maintained, and sickness and disease prevented. In India, where the distances are so great as to render it often very difficult to obtain medical aid, it becomes important that nurses and mothers should know the course to be adopted in sudden emergencies and accidents.

Conduct in cases of accident.—In all cases of accident, the safety of the injured one depends upon the first steps taken by those around to afford relief. If from the following pages a mother learns how to act efficiently in such emergencies, she will have the pleasing satisfaction of knowing that she has gained that knowledge which may enable her at any moment to soothe the suffering, alleviate the pain, and expedite the cure of her child, or to save the life of another.

It is necessary in all cases of accidents to pay particular attention to the following points, in order that the treatment may be rewarded with the greatest success:—

1. Try to be collected, calm, and decided; and before adopting any mode of treatment make up your mind definitely as to what you intend to do. Having decided upon a course, carry out your intentions calmly and firmly, paying no attention to modifications suggested by bystanders, which may cause delay and increase the sufferings of the injured one.
2. Lay the patient in a position which is the most comfortable—usually on the back, and so in a horizontal position; but if a difficulty is experienced in breathing when so placed, then slightly raise the upper part of the body.
3. Loosen the clothes about the neck, chest, and waist.
4. If the body of the patient feels cold, cover it with blankets; restore warmth by friction or other artificial means, unless the coldness is attended by copious bleeding.
5. Do not administer stimulants unless the patient is completely exhausted, or remains in a fainting condition for more than twenty minutes, and even then only give small quantities.

Treatment of small cuts or wounds which are not of sufficient importance to need the advice of a surgeon. Such injuries are often rendered very troublesome or even dangerous by unskilful treatment. Care should always be exercised, therefore, even in the treatment of slight cuts and simple wounds. The wound should be washed with a little warm water, if at hand, or cold water may be allowed freely to flow over it, the wound being afterwards wiped with clean linen. Such a mode of treatment secures the removal of dirt or foreign matter. The cut edges should then be pressed firmly together, and held in their places by strips of plaster placed at right angles to the cut.

Where cuts are more serious it becomes necessary to modify the mode of treatment, according to the kind of vessel from which the blood is escaping. The blood is contained in the body **three kinds of blood-vessels**—namely, **arteries, veins**, and the very minute vessels which connect the smaller arterial branches with the small veins—the **capillaries**. The arteries are usually more deeply seated than the veins; in fact, most of the blood-vessels which can be seen through the skin with the naked eye are veins. The blood contained by these three classes of vessels varies in colour; that present in the arteries is bright red, and that of the veins dark red, whilst that which is found in the capillaries is intermediate in colour.

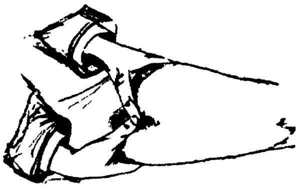


Fig. 27.—Compression applied to stop bleeding from artery in thigh

The differences in the manner in which the blood leaves the vessels as well as its colour, enables one to determine the source from whence it comes.

The blood which issues from a **wounded artery** is of a bright red colour, and spurts forth in jets corresponding to the beats of the heart, whilst that from a vein is much darker in colour, and flows in a continuous stream. In bleeding from capillaries the blood oozes from the wound.

Bleeding may generally be stopped by pressure properly applied. Remembering that the blood *flows along veins towards the heart*, and along the *arteries away from the heart*, it becomes necessary to explain how and where the pressure should be applied in the case of the two kinds of vessels. Where bleeding is **from a wounded vein**, if direct pressure will not stop the flow of blood, a ligature should be passed round the limb, and made to tightly press on the side of the cut **remote from the heart.**

The blood from an **injured artery** is jerked or spurts out from the side of the wound which is nearer to the heart. If direct pressure will not check the bleeding, in this case a tight ligature must be passed round the limb, and be made to press especially on the part of the wounded vessel which is **nearer to the heart.**

When bleeding is taking place from the external surface of the body from any cause, try—

Direct pressure on the part, and raise the limb above the level of the body. If the wound is in the leg, let the patient be placed on the back and raise the leg. The pressure may be produced by any soft substance, such as a handkerchief, sponge, cotton-wool, or even the fingers.

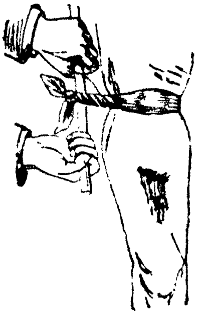


Fig. 28. — Tourniquet made from handkerchief and ruler to stop [illegible]

If the above means are not attended with the desired effect, but the bleeding remains unchecked by simple pressure, it is necessary to **pass a tourniquet or ligature round the limb** as tightly as possible *immediately above* the point from which the blood issues. A medical man should then be sent for, or the patient carefully removed to the hospital or to some place where surgical aid may be obtained. The ligature above alluded to may be made with a pocket-handkerchief, strips of cloth, rope, twine, or indiarubber cord.

In cases of scalp wounds, pressure can be made on the wound itself by means of some soft substance, such as a handkerchief, cotton-wool, or a piece of lint.

If a pad is made of such a substance, and held pressed tightly down by the fingers, it will in most cases at once arrest the bleeding.

Bleeding from the face and jaws may generally be arrested in the same manner—that is, by using a pad to press the wounded part down upon the hard bones, which are beneath.

When the bleeding is coming from a diseased surface—abscess, ulcer, or such like—and direct pressure does not check the flow of blood, the wound should be bandaged tightly with styptic wool, which may be prepared by soaking good cotton-wool in a strong solution of alum or tincture of steel, and allowing it to dry gradually. If no styptic wool is at hand, then ordinary wool or linen rag soaked in cold water, and made into a pad, should be tied tightly round over the wound.

Varicose veins are due to the giving way of the little valves which normally regulate the flow of blood in the veins—the weight of the column of blood being uncontrolled, causes the veins so diseased to become dilated. When a varicose vein in the leg has burst, the limb should be raised higher than the rest of the body, and a handkerchief or other bandage should be tied tightly below the wound.

In cases where **blood flows from the nose** as the result of injury to some of its blood-vessels, cold water or ice should be applied. Some persons are very subject to bleeding from the nose, by which means it not unfrequently happens that they lose a very considerable quantity of blood; in the case of growing children, and those suffering from debilitating diseases, this becomes a very serious matter, and means should at once be adopted to allay the flow of blood. In such cases the patient should be kept perfectly quiet on his or her back, cold being applied at the same time to the back of the neck, and a cold pad kept over the nose. If, however, such means fail to check the flow of blood, a piece of cotton-wool or styptic wool folded and tied to a piece of string should be introduced into the nose, and gently pressed upwards.

The vomiting or coughing up of blood in considerable quantities are symptoms of grave importance, which are often present in ulceration of the stomach and consumption in its many phases. In such cases the best plan is to keep the patient as quiet as possible; he should not be permitted to speak under any condition, but should be allowed to breathe fresh air freely, and ice or iced milk or water may be given. If the bleeding is very considerable, a cold wet towel may be applied to the chest, and if the blood flows from a broken vessel in the lungs, the patient should be allowed to inhale freely the vapour of turpentine mixed with steam. This may be prepared by mixing three tablespoonfuls of turpentine with about a quart of boiling water—the mixed steam and vapour given off by which may be inhaled by the patient.

In cases of bleeding, the patient frequently becomes weak and faint. This is not necessarily a dangerous or serious sign, for the faintness, which results in a quieted or reduced circulation, facilitates the staying of the bleeding, for, the rate of flow and pressure being reduced, the blood sooner coagulates and forms little plugs of clot, which naturally close the injured vessels and check the flow of blood. Of course, if the faint is prolonged and the bleeding does not diminish, it becomes necessary to adopt means to revive the patient.

Treatment of Burns.—Burns are produced by flames and hot solid substances; they vary in severity according to the source of heat by which they are produced, and the length of time during which the injured part is exposed. They may vary in nature from a slight redness of the skin to complete charring and destruction of the skin and flesh.

Scalds are produced by hot fluids: those resulting from oil or milk are more severe, as a rule, than those produced by water. The danger which attends this class of injuries varies with the part and the extent of the body involved; for example, even slight burns or scalds, which involve a large surface, are generally more serious than severe burns which only effect a more limited area. Where the burn or scald is slight, and *there is no actual wound*, the part may be bathed with, or soaked in, a strong tepid solution of washing soda.

The means that may be taken to relieve the suffering in the case of this class of injuries are:—

Firstly, is to exclude the air as quickly as possible by **pouring over the injured part some linseed or sweet oil.**

Secondly, **carefully remove all clothing** in contact with the part. If this cannot be easily done, the garments should be freely cut, in order that the pain and suffering may not be increased unnecessarily by dragging the clothes over the injured part. The oil may be poured upon or between the clothes and the body, if the burn is severe, for the oil softens the cloth and facilitates the removal of the clothes, thereby reducing the chances of tearing away the skin.

Thirdly, **soak some cotton-wool or lint in** linseed or pure sweet oil, and apply it to the injured part, renewing the application from time to time. Carron oil, which consists of equal parts of limewater and linseed oil, is one of the best remedies which can be employed. The oil employed may be either linseed, olive, or almond oil, never any mineral oil, such as paraffin or naphtha.

Owing to the inflammable nature of clothing worn in India, especially that of women and young children, it not unfrequently happens that the clothes take fire. In no case of accident is there greater need for presence of mind and coolness. Remember that air is necessary for combustion; therefore, if a person's clothes take fire means should immediately be adopted to cut off the supply of air. This object may be attained by enveloping the person in a cloak, rug, blanket, or similar article. People should remember that if a person on fire runs the consequences will probably prove fatal; a person whose clothes catch fire should throw himself down and roll over and over. Remember that persons who have been scalded or burnt suffer much from shock, and need relief from this; after attention has first been paid to the injured part, therefore, apply warm coverings and give warm stimulating drinks.

Treatment of Bites.—*Bites* of animals with sharp teeth, such as cats, dogs, and fishes, may produce one or more punctured or incised wounds, or tear the flesh and produce a lacerated wound, or they may simply cause abrasions of the skin. The mode of treatment to be recommended will, of course, vary with the nature of the injury. Where the pain is severe, hot fomentations or poultices are most soothing in their effects.

A great deal of misapprehension exists as to the danger incurred by the bites of dogs, and it therefore will not be out of place to remark that there is no fear that hydrophobia will ensue unless the dog is affected with the disease.

The following notice with respect to the subject of hydrophobia has recently been issued by the Brown Institution :—

"This disease occurs in dogs of all ages, and may appear at any season of the year. It is recognised by a change of demeanour of the dog, which becomes dejected, morose, inclined to roam, and anxious to hide itself. The animal gnaws at wood, stones, or any refuse which it sees, snaps at imaginary objects, and becomes unusually excited by strange or sudden noises. It rubs its throat with its paws, as if striving to get rid of some object lodged there; at the same time there is a more or less abundant flow of saliva from the mouth. The animal is, moreover, very readily excited, and barks with a peculiar, harsh, strange cough. The dog will attack its master or animals of any kind; but it is most easily roused to fury by the presence of other dogs. It is feared and shunned by healthy dogs—not only when it attacks them, but when the disease is in a very early stage. There is throughout the disease no dread of water. Before the tendency to bite shows itself the animal may be unusually affectionate to his master—licking his face and fawning upon him. In one form of the disease, called "dumb madness," there is a paralysis of the jaw, and therefore inability to bite. If a dog has shown any of the symptoms of madness mentioned above, or an unusual tendency to bite other animals, it should be at once loose-muzzled and securely chained up, but it is advisable that it should not be destroyed until it has been examined by some authority capable of determining whether the animal be rabid or not. Owners of dogs are warned of the danger they may incur by allowing their faces and hands (especially if scratched) to be licked by the animals, even if these show no sign of

When a person is bitten by a mad animal or snake at once suck the wound; do not lose a moment. If the wound be in a limb tie the part above the wound—*i.e.*, on the side of the wound which is nearer to the heart—and encourage it to bleed; and then suck it again. This may be done without fear, provided that the operator has no wound on lips, tongue, or mouth.

Stings.—The pain caused by the stings of wasps, bees, hornets, mosquitoes, etc., may be lessened by a few simple precautions. The sting, when left in the wound, should be first carefully extracted, and it is a good plan to then press the barrel of a key firmly round the part. This precaution will prevent the irritating poison from spreading. As the poison is mostly of an acid nature, the application of a little alkali, such as hartshorn, to the injured part, will produce immediate relief. Common soda will answer very well; and in many cases application of soap, oil, or glycerine to the injured surface has been found useful.

Bruises and sprains.—When a part of the body is *bruised* it becomes swollen and discoloured, assuming a blue or blackish tint. Where the skin is not broken the discoloration may not be seen at first, but in the course of a few days the surrounding skin becomes yellow or red and blue. The discoloration and swelling are due to the escape of blood into the surrounding tissues; the part should, therefore, be kept at rest, and cold should be applied. The injured part should be bathed and kept cool by the application of very cold water. A piece of ice wrapped in linen and made into a cold pad is of great service. In cases where a bruise is associated with abrasion of the skin, it is a good plan to first apply a little *vaseline* to the wounded surface, and then place the cold pad or ice in position.

The *sprains* of muscles or joints are often exceedingly troublesome injuries to recover from. They require, in the first place, absolute rest for the part injured. An application of heat gives the greatest ease, therefore the part may be bathed with hot water. The addition of some sea-salt to the water will increase its usefulness.

Some prefer to adopt the "cold water cure." The object then is to keep down the temperature of the injured part by the repeated application of cold water. When the swelling is passing off, the part should be rubbed and carefully exercised. Too prolonged rest is not advisable, as stiffness follows.

Fainting, fits, and sudden illness.—When a person becomes insensible through *faintness*, it is necessary to decide at once what means to take for his or her recovery. The following simple rules will be found of general use in such cases, but must, of course, be varied according to circumstances:—

1.—*Lay the person flat on the back, without a pillow for the head; in fact, if it can be arranged, it is better for the head to be lower than the rest of the body.*
2.—*Loosen all tight parts of the dress, especially about the neck, chest, and waist.*
3.—*If in a close-heated room, church, theatre, etc., remove the patient to the fresh air at once.*
4.—*Smelling salts or spirits of hartshorn should be held near the nostrils.*
5.—*Cold water should be sprinkled over the face: and should the patient not recover, cold water may be applied to the chest. A towel dipped in cold water will answer for this purpose very well.*
6.—*On the return of consciousness, if the patient remains weak, administer stimulants in small doses.*

When the fit is accompanied by restlessness or convulsions, cold should be applied to the head, and the patient should be restrained, and if consciousness does not soon return, medical advice should be obtained. It not unfrequently happens that well-intentioned people try to force liquids into the mouths of those suffering from convulsions; it is, therefore, well to remember that this practice is attended with the greatest danger.

Convulsions in children call for great promptitude on the part of those at hand. If the child is fairly strong it should be placed in a warm bath, and the head should be kept cold by a piece of linen or flannel soaked in cold water. If the child is weak, then a blanket bath should be administered instead of the warm-water bath.

Sunstroke and Heatstroke are a most common form of accident in India. While the former usually comes on quite suddenly when a person is exposed to the direct rays of the sun, the latter may be produced at night during the very hot season of the year. Where due care is taken to cover the head and back of the neck by means of a turban or sun hat the liability to sunstroke is reduced to a minimum. Against the causes which tend to produce heatstroke, however, the preventative measures are not so simple. The matters to be attended to are good ventilation of bedrooms and avoidance of overcrowding. Abstinence from all alcoholic liquors is a great safeguard against heat- or sunstroke, and a good rule is to avoid sleep immediately after a meal.

Where symptoms of sunstroke or heatstroke occur—

1. Carry the patient to a cool, shaded place, or dark room.
2. Remove the clothes at once, and lay the patient in a horizontal position, with the head and shoulders somewhat raised above the level of the body.
3. Pour cold water over the head, chest, and spine, till the patient begins to revive, or until medical aid is obtained.
4. Allow the patient to remain as quiet as possible.

Poisoning.—Where a child or adult has taken poison either wilfully or accidentally, it is usually difficult to discover at once the nature of the poison which has been given or taken. It is practically impossible in this small work to give precise details of the symptoms which are indicative of different poisons, but at the same time some general rules may be laid down which should serve as a safe guide on an emergency.

It is first necessary to decide whether it is probable that any case of sudden illness is one of poisoning or not; and the following points should guide one in the decision:—

1. In a real case of poisoning the symptoms appear suddenly. Such is rarely the case in diseases, save **apoplexy, sunstroke,** and **cholera.** It therefore follows that when a person is suddenly seized with any of the following symptoms—vomiting, purging, delirium, or insensibility—that poison has been introduced into the body.
2. The symptoms make their appearance after food or drink has been taken.
3. Several persons who have partaken of the same food or drink will develop similar symptoms. Cholera is the only disease which is likely to affect several previously healthy people at the same time.

Having decided that a person has been poisoned, the next point is to determine as far as possible the nature of the poison. For convenience, all common poisons may be divided into three classes:—

(*a*) Those which behave as narcotics and induce sleep.
(*b*) Those which are corrosive and, in consequence, destroy more or less the membranes of the mouth and throat.
(*c*) Those which cause delirium.

The narcotic poisons usually contain opium in some form or other. The symptoms are usually drowsiness and deep sleep. The pupils of the eyes become very much contracted, the breathing becomes noisy, and the skin warm. Vomiting rarely occurs without the administration of an emetic.

Treatment.—As soon as possible administer an emetic such as may be prepared by mixing one ounce of common table salt with six ounces of warm water. This should be given every quarter of an hour until vomiting occurs. A better emetic for adults is prepared by mixing about a quarter of an ounce of powdered mustard to six ounces of water. A still better emetic may be prepared from sulphate of zinc in doses of twenty to forty grains every quarter of an hour, or sulphate of copper dissolved in water in five to ten-grain doses. Since the tendency of poisons of this class is to induce sleep, every effort should be made to keep the patient awake by giving drinks of strong coffee, walking exercise, and cold water should be dashed over face and neck. In extreme cases, artificial respiration, as described on p 88, must be resorted to, and kept up for several hours. It is advisable to administer a purgative some hours after vomiting has been induced.

The corrosive poisons include all those which tend to destroy the lining membrane of the mouth and alimentary canal. They are distinguished at once from all others by the fact that they cause acute pain. Poisons of this class are often called acid poisons, but they include strong acids, alkalies, and certain metallic substances.

The acids which are most frequently met with as poisons are :—carbolic, oxalic, hydrochloric or muriatic, sulphuric or oil of vitriol.

The alkalies which commonly give rise to cases of poisoning are caustic soda.

The metallic substances are compounds containing mercury.

Treatment.—A person who has taken a poison belonging to either of these classes usually complains of burning pains in the throat and stomach, accompanied by vomiting and purging. **Emetics should not be administered**, but olive or linseed oil or egg should at once be given.

Where the substance is an acid, give some harmless alkali, such as chalk or magnesia. In cases where alkalies have been swallowed, some mild acid should be given, such as acetic acid (vinegar), or the juice of lemons.

The poisons which produce excitement and delirium usually cause a peculiar taste, and give rise to thirst, and pain in the stomach and throat. In India the best known poisons of this class are opium, datura, and arsenic. The symptoms vary with the amount, the kind of material, and with the individual; but usually they take the form of excitement, followed by sleep and delirium, insensibility and death; convulsions sometimes occur.

Treatment should be the same as in cases of narcotic poisoning. The first point to be attended to in both cases is to rid the stomach of the objectionable matter by the action of an emetic, and then to administer some soothing drink, such as raw egg or egg and milk. When recovering, the patient needs stimulant, such as strong tea and coffee.

The following general rules should be remembered and acted upon in cases of poisoning:—

1. When a person who has swallowed a poison seems likely to go to sleep keep him awake at all costs.
2. Should he exhibit a tendency to go off into a fit, throw cold water into his face.
3. When there are no stains about the mouth or burning of the skin, give an emetic at once, eggs, milk, linseed or salad, but **not almond** oil, and then strong tea or coffee.
4. In cases where there are stains about the mouth and burning of the skin do not give an emetic, but oil at once, followed by milk, or raw egg and flour beaten up with water.
5. Where phosphorus is the poison **do not give oil,** but frequent doses of magnesia and water.

Foreign bodies in the eye, nose, and ear.—It not unfrequently happens that particles of dust, pieces of stone, metal, insects, etc., lodge under the eyelids, and give rise to much irritation. Any of the above may usually be removed with the folded corner of a handkerchief. If much dust has passed under the eyelid it may generally be removed by carefully syringing with warm water. After the removal of the irritating substance, if the eye continues to be painful, it is a good plan to drop between the lids a little sweet or olive oil. If the pain still continues, a cold, wet compress should be applied. Quicklime, pieces of mortar, or other matters which are likely to irritate and burn sometimes find their way under the eyelid. They should be removed as speedily as possible, and the eye should be bathed with warm water and a little oil dropped between the lids as before.

Young children sometimes push pieces of pencil, parts of toys, beads, etc., into the nostrils. They should, if possible, be at once carefully removed; if it is difficult to do this, a surgeon should be consulted.

Flies and insects sometimes find their way into the ears. Sometimes children introduce into the tube of the ear bodies similar to those passed into the nose. The ear should, in such cases, be syringed out with warm water, and a little glycerine or oil dropped into the passage; but if the body is a solid, like a bead or piece of pencil, and it is not washed out by the syringing, then medical aid should be called in. The inexperienced should not try to remove the foreign body except by syringing, for efforts in this direction may result in injury to the delicate drum of the ear.

The following system of restoring the apparently dead is recommended by the Royal Humane Society of London:—

If from drowning, suffocation, or narcotic poisoning.—Send for medical assistance, blankets, and dry clothing, but proceed to treat the patient instantly.

The points to be aimed at are—first, and immediately, the restoration of breathing; and *secondly*, after breathing is restored, the promotion of warmth and circulation.

The efforts to restore life must be persevered in until the arrival of medical assistance, or until the pulse and breathing have ceased for an hour.

RULE 1.—*To adjust the Patient's Position.* Place the patient on his back on a flat surface, inclined a little from the feet upwards; raise and support the head and shoulders on a small firm cushion or folded article of dress placed under the shoulder-blades. Remove all tight clothing about the neck and chest.

RULE 2.—*To maintain a Free Entrance of Air into the Windpipe.* Cleanse the mouth and nostrils; open the mouth; draw forward the patient's tongue, and keep it forward: an elastic band over the tongue and under the chin will answer this purpose.

Rule 3.—*To imitate the Movements of Breathing.*

First.—**Induce inspiration.** Place yourself at the head of the patient, grasp his arms, raise them upwards by the sides of the head, stretch them steadily but gently upwards for two seconds. [*By this means fresh air is drawn into the lungs by raising the ribs.*]

Secondly.—**Induce expiration.** Immediately turn down the patient's arms, and press them firmly but gently downwards against the sides of his chest, for two seconds. [*By this means foul air is expelled from the lungs by depressing the ribs.*]

Thirdly.—**Continue these movements.** Repeat these measures alternately, deliberately, and perseveringly, fifteen times in a minute, until a spontaneous effort to respire be perceived. [*By these means an exchange of air is produced in the lungs similar to that effected by natural respiration.*]

When a spontaneous effort to respire is perceived, cease to imitate the movements of breathing, and proceed to induce circulation and warmth (*as below*).

Rule 4.—*To excite Respiration.* During the employment of the above method excite the nostrils with snuff or smelling-salts, or tickle the throat with a feather. Rub the chest and face briskly, and dash cold and hot water alternately on them. Friction of the limbs and body with dry flannel or cloths should be had recourse to. When there is proof of returning respiration, the individual may be placed in a warm bath, the movements of the arms above described being continued until respiration is fully restored. Raise the body in twenty seconds to a sitting position, dash cold water against the chest and face, and pass ammonia under the nose. Should a galvanic apparatus be at hand, apply the sponges to the region of diaphragm and heart.

Treatment after natural breathing has been restored.—*To induce circulation and warmth.* Wrap the patient in dry blankets, and rub the limbs upwards energetically. Promote the warmth of the body by hot flannels, bottles or bladders of hot water, and heated bricks, to the pit of the stomach, the armpits, and to the soles of the feet.

On the restoration of life, when the power of swallowing has returned, a teaspoonful of warm water, small quantities of wine, warm brandy and water, or coffee should be given. The patient should be kept in bed, and a disposition to sleep encouraged. During reaction large mustard plasters to the chest and below the shoulders will greatly relieve the distressed breathing.

Note.—In all cases of prolonged immersion in cold water, when the breathing continues, a warm bath should be employed to restore the temperature.

If from intense cold.—Rub the body with snow, ice, or cold water. Restore warmth by slow degrees. It is highly dangerous to apply heat too early.

If from intoxication.—Lay the individual on his side on a bed, with his head raised. The patient should be induced to vomit. Stimulants should be avoided.

If from apoplexy or from sunstroke.—Cold should be applied to the head, which should be kept well raised. Clothing removed from the neck and chest. Stimulants avoided.

Appearances which generally indicate death.—There is no breathing or heart's action; the eyelids are generally half-closed; the pupils dilated; the jaws clenched; the fingers semi-contracted; the tongue appearing between the teeth, and the mouth and nostrils are covered with a frothy mucus. Coldness and pallor of surface increases.

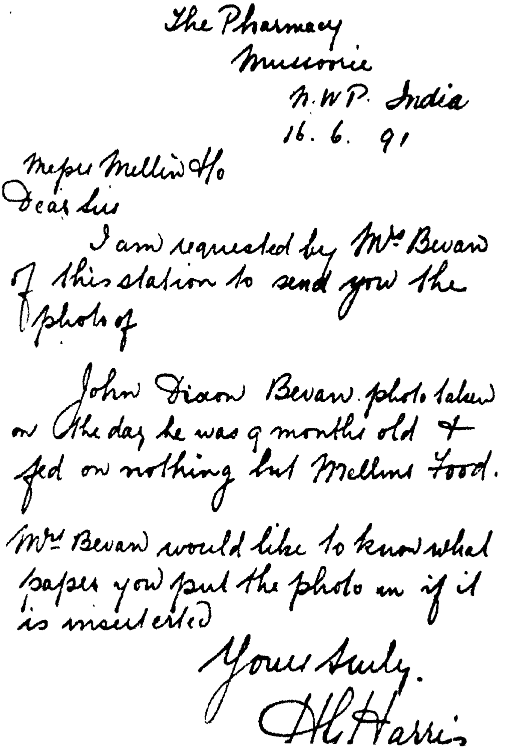
The treatment recommended by the Society is to be persevered in for three or four hours. It is an erroneous opinion that persons are irrecoverable because life does not soon make its appearance, as cases have come under the notice of the Society of a successful result even after five hours' perseverance.

PART II.

FAC-SIMILE
LETTERS OF PARENTS
AND
PHOTOGRAPHS OF
ANGLO-INDIAN INFANTS

Reared upon Mellin's Food.

MASTER BEVAN. (Aged 9 months.)



The Pharmacy
Mussoorie
N.W.P. India
16. 6. 91

Messrs Mellin & Co
Dear Sirs

I am requested by Mrs Bevan of this station to send you the photo of

John Dixon Bevan. photo taken on the day he was 9 months old & fed on nothing but Mellins Food.

Mrs Bevan would like to know what papers you put the photo in if it is inserted

Yours truly.
H. Harris

MISS DODSON. (Aged 9 months.)

Trichinopoly South India
Nov. 5th 1890

Sir,

I beg to enclose you one of my little girl's photos, she was 9 months old when it was taken last month her weight is 25 lbs.

For six months I nursed her entirely myself, since that time she has been taking your food also, in increasing proportions.

I have a great belief in your food as it seems to suit all children admirably out here, and certainly my baby is considered a wonder of health for an Indian child, for which reason you have my permission to make any use you like of this testimonial or photo for publication.

Ellen A Dodson

(Mrs T. K Dodson)

MASTER WOOLWARD.
(Aged 9½ months.)

The Green,
Monghyr,
India.

Dear Sir,

I have much pleasure in sending you a photo of my baby Fred, taken when he was 9½ *months old. Since the age of two months he has been entirely fed on your Food, the photo speaks for itself how well he has thriven, and for an infant brought up on the plains of India, he is strong, sturdy, and remarkably healthy.*

I cannot speak too highly of your Food, and shall always recommend it as decidedly *being the best for infants.*

Yours truly,
KATIE WOOLWARD.

Oct. 20, 1894.

MASTER GERALD MURRAY.
(Aged 5 months.)

The New Home,
Mussoorie,
N. W. P.

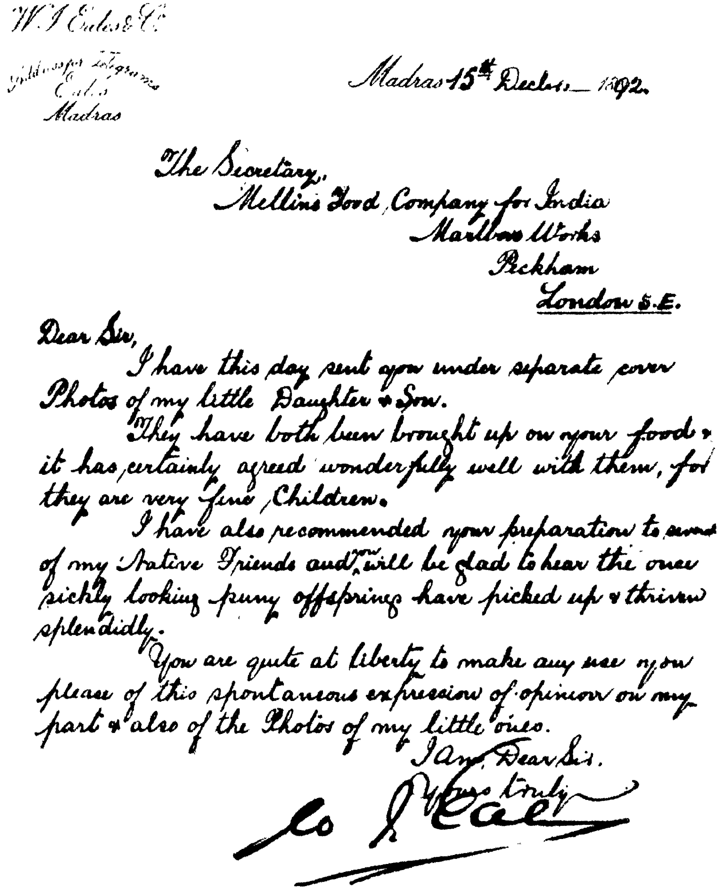
Dear Sir,

Enclosed you will find a photo. of my baby boy Gerald Murray, aged five months, who has been brought up on your Food from the first two months.

Yours faithfully,
G. W. MURRAY.

October 28, 1894.

MASTER WILLIAM JOHN EALES.
(Aged 1 year 11 months.)



W. J. Eales & Co.
Address for Telegrams
Eales
Madras

Madras 15th Decbr. — 1892.

The Secretary,
Mellins Food Company for India
Marlboro Works
Peckham
London S.E.

Dear Sir,

I have this day sent you under separate cover Photos of my little Daughter & Son.

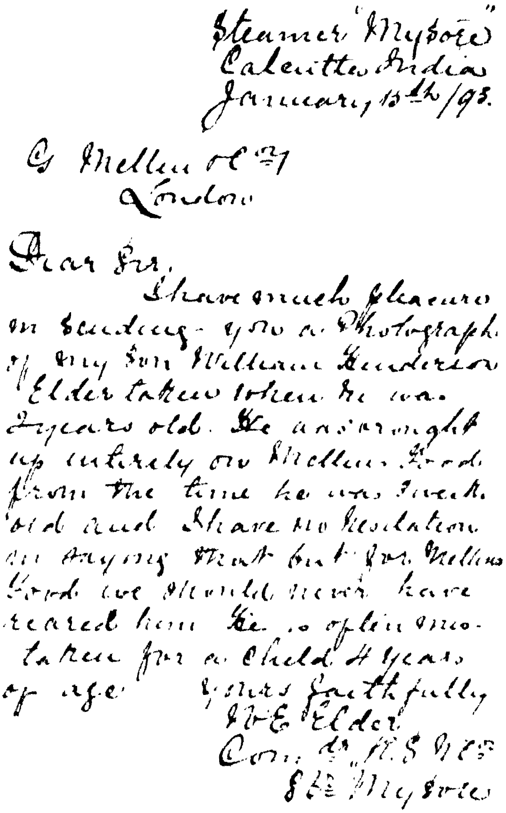
They have both been brought up on your food & it has certainly agreed wonderfully well with them, for they are very fine Children.

I have also recommended your preparation to some of my Native Friends and you will be glad to hear the once sickly looking puny offsprings have picked up & thriven splendidly.

You are quite at liberty to make any use you please of this spontaneous expression of opinion on my part & also of the Photos of my little ones.

I am, Dear Sir,
Yours truly

WILLIAM HENDERSON ELDER.
(Aged 2 years.)



Steamer "Mysore"
Calcutta India
January 13th/93.

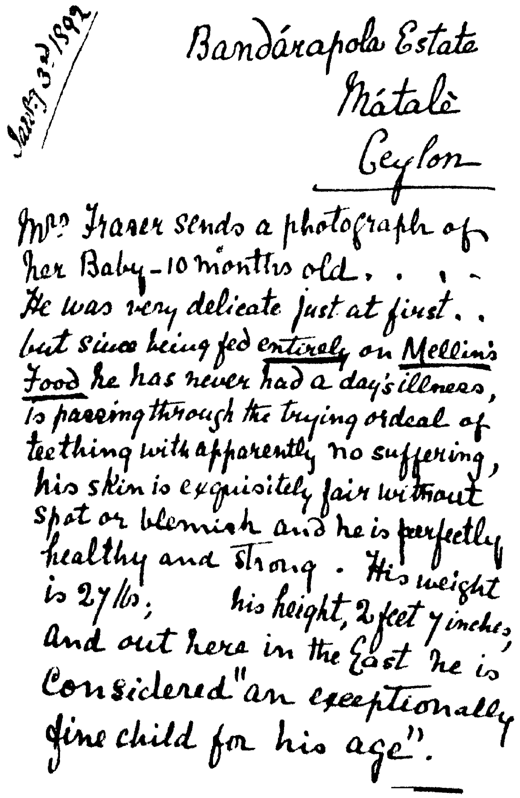
G Mellin & Co
London

Dear Sir,

I have much pleasure in sending you a Photograph of my Son William Henderson Elder taken when he was 2 years old. He was brought up entirely on Mellins Food from the time he was 1 week old and I have no hesitation in saying that but for Mellins Food we should never have reared him. He is often mistaken for a Child 4 years of age.

Yours faithfully
W E Elder.
Com. B.I.S.N. Co
S.S. "Mysore"

MASTER A. E. H. FRASER.
(Aged 10 months.)

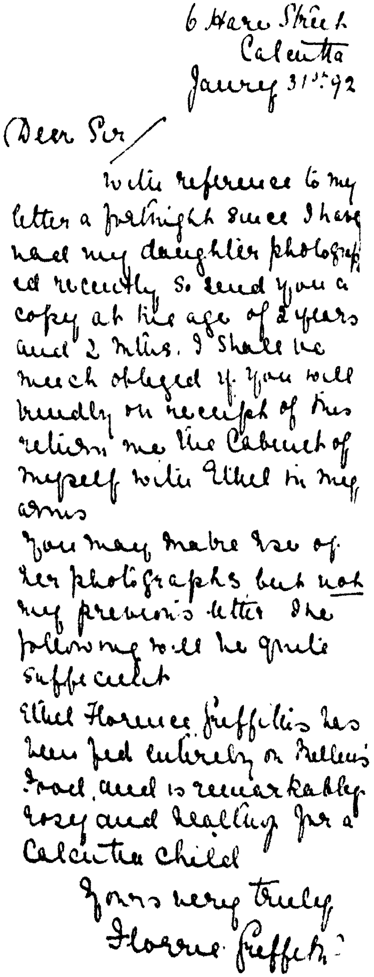


Jany 3rd 1892

Bandárapola Estate
Mátalè
Ceylon

Mrs Fraser sends a photograph of her Baby - 10 months old. . . . He was very delicate just at first. . but since being fed entirely on Mellin's Food he has never had a day's illness, is passing through the trying ordeal of teething with apparently no suffering, his skin is exquisitely fair without spot or blemish and he is perfectly healthy and strong. His weight is 27 lbs; his height, 2 feet 7 inches, and out here in the East he is considered "an exceptionally fine child for his age".

MISS GRIFFITHS (Aged 8 months.)



6 Hare Street
Calcutta
Janry 31st 92

Dear Sir/

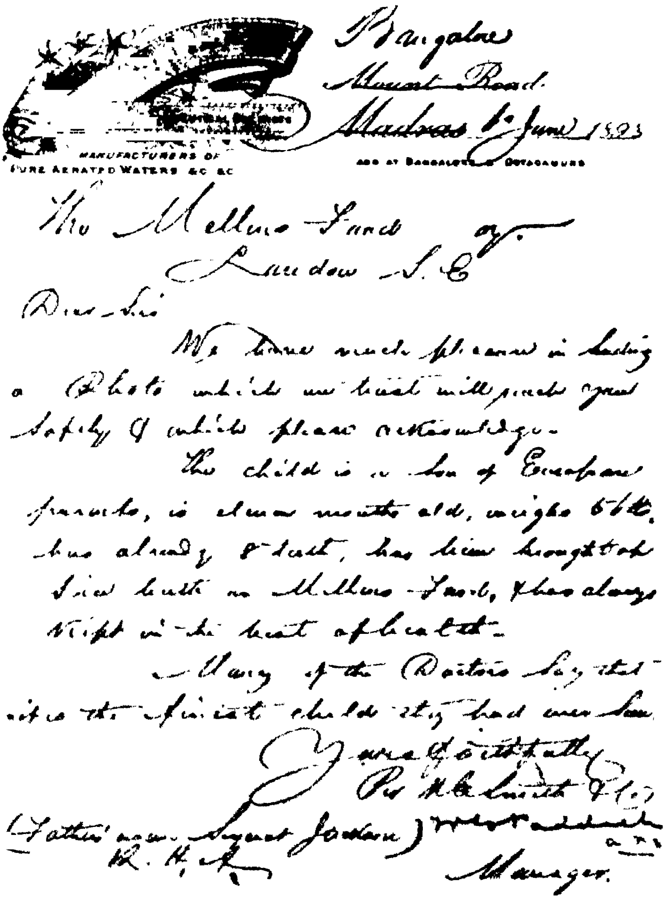
With reference to my letter a fortnight since I have had my daughter photographed recently so send you a copy at the age of 2 years and 2 mths. I shall be much obliged if you will kindly on receipt of this return me the Cabinet of myself with Ethel in my arms

You may make use of her photographs but not my previous letter the following will be quite sufficient

Ethel Florence Griffiths has been fed entirely on Mellin's Food and is remarkably rosy and healthy for a Calcutta child

Yours very truly
Florence Griffiths

MASTER JACKSON.
(Aged 11 months.)



MANUFACTURERS OF
PURE AERATED WATERS &c &c
AND AT BANGALORE & OOTACAMUND

Bangalore
Mount Road.
Madras 1st June 1893

The Mellin's Food Coy.
London S.E.

Dear Sir

We have much pleasure in sending a Photo which we trust will reach you safely & which please acknowledge.

The child is a son of European parents, is eleven months old, weighs 26 lbs. has already 8 teeth, has been brought up since birth on Mellin's Food, & has always kept in the best of health.

Many of the Doctors say that it is the finest child they had ever seen.

Yours faithfully
Per M. Smith & Co
Manager.

(Father's name Sergeant Jordan)
R. H.

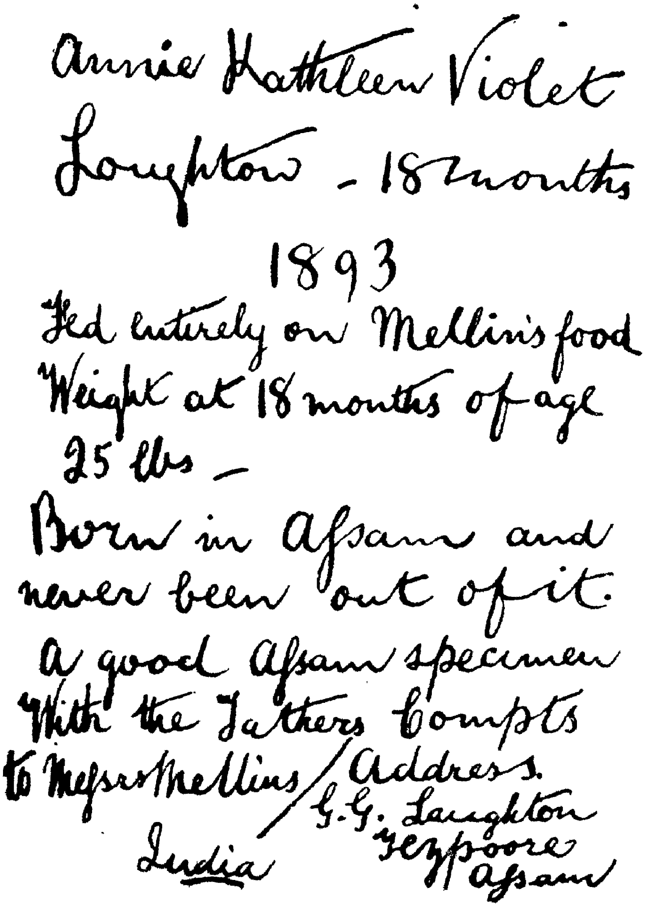
MISS ROSE LAPERE.
(Aged 4 months.)

Eversheds Hotel
Merchants St
Rangoon
Burmah
18/7/1893

Dear Sir
I have great pleasure of sending you a photo of my little Daughter (Rose) who has been brought up from her birth on Mellins food and I can say without the sligtest hesitation she is one of the finest and healthiest in India and I put it down to nothing but your food the enclosed photo was taken when she was four months and six days old

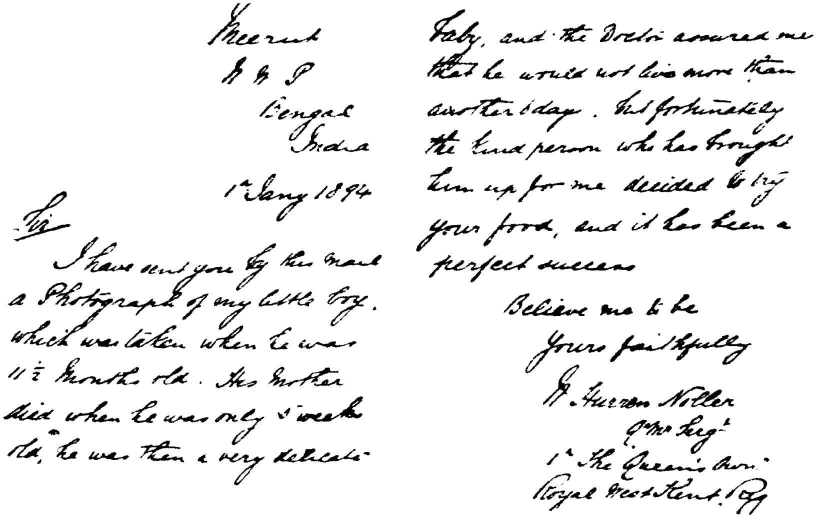
Yours Sincerely
Mrs Lapere

ANNIE K. V. LOUGHTON,
(Aged 18 months.)



Annie Kathleen Violet
Loughton - 18 months
1893
Fed entirely on Mellin's food
Weight at 18 months of age
25 lbs -
Born in Aſsam and
never been out of it.
A good Aſsam specimen
With the Fathers Compts
to Meſsrs Mellins / Address.
G. G. Laughton
Tezpoore
Aſsam
India

MASTER NOLLER.
(Aged 11½ months.)



Meerut
N W P
Bengal
India

1st Jany 1894

Sir

I have sent you by this mail a Photograph of my little boy, which was taken when he was 11½ Months old. His Mother died when he was only 3 weeks old, he was then a very delicate baby, and the Doctor assured me that he would not live more than another 6 days. But fortunately the kind person who has brought him up for me decided to try your food, and it has been a perfect success

Believe me to be
Yours faithfully
G. Hurron Noller
QrMr Sergt
1st The Queen's Own
Royal West Kent Regt

MISS FLORENCE PALMER.
(Aged 2 years 3 months.)

MISS MAUD PALMER.
(Aged 13 months.)

Tharrawaddy,
Lower Burmah,
August 13, 1894.

Dear Sirs,

I have much pleasure in sending you a photograph of my two children, Florence and Maud Palmer, aged two years and three months and one year. They have been entirely brought up on your Food since their birth, and have given me no anxiety, as they have kept perfect health, and teethed very easily. Both began to walk at the age of ten months.

I should like to mention to you that I did not find the quantities given in the directions agree with my children.

When they reached their third month I was then giving them a full tea-spoon of your Food, at six months a dessert-spoonful, and a table-spoonful at the age of a year old, *and I found them do excellently. I know of two cases where mothers have tried your Food according to directions, and have been obliged to stop it, as it has not agreed with their children: but no sooner the quantities were lessened the children did well.*

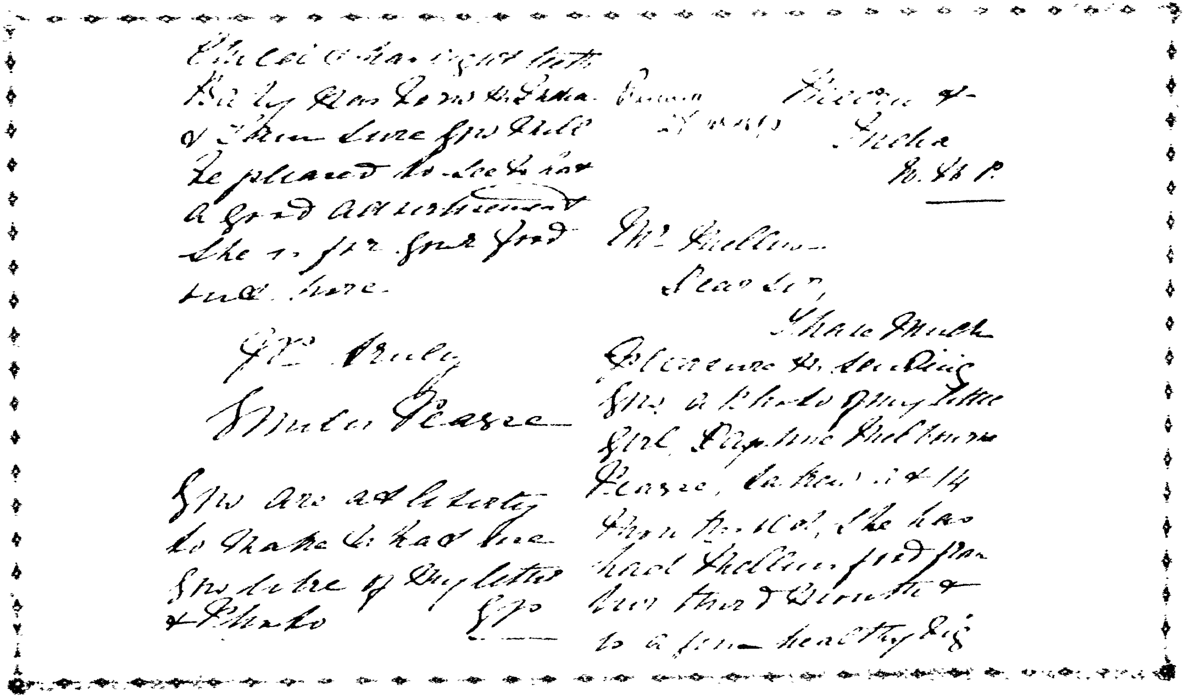
I have recommended your Food to all mothers, as I think that through it my babies have been reared, as they were very delicate children when born.

Please acknowledge the photograph, as I should like to know of its arrival.

Yours faithfully,
E. M. PALMER.

To Messrs. Mellin, & Co.,
Marlboro' Works, London, S.E.

MISS PEARSE.
(Aged 14 months.)



[illegible] Terrace 4
[illegible]
[illegible]
Feb. 8th [illegible]

Mr. Mellin—

Dear Sir,

I have much pleasure in sending you a photo of my little girl Daphne Mellin Pearse, taken when 14 months old. She has had Mellin's food from her third month & is a fine healthy big child & has eight teeth [illegible] & I am sure you will be pleased to see her as a good advertisement. She is fed on your food and [illegible].

Yrs truly
Amelia Pearse

You are at liberty to make what use you like of my letter & photo.
Yrs
A.P.

MASTER WALTER C. PRICE.
(Aged 5 months.)

163, *Camp Road,*
Rangoon,
Burma, India.

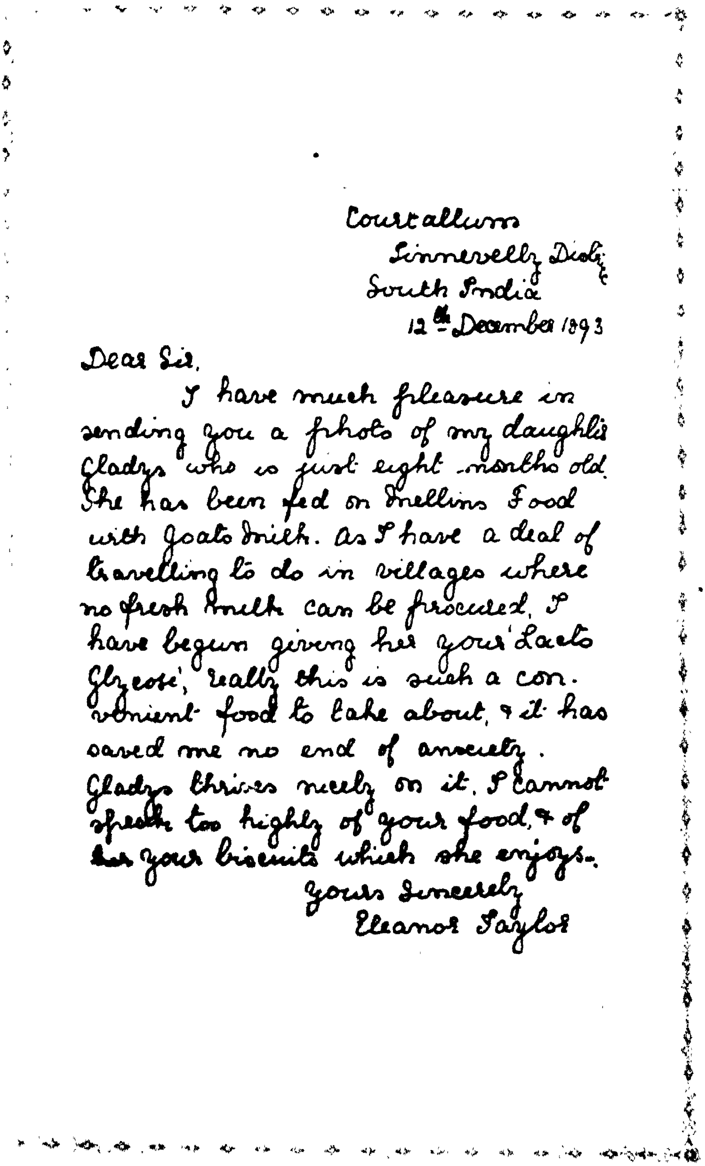
Dear Sir,

I have much pleasure in sending you a photo of my little son, Walter Cyril, who is considered by all those who have seen him to be the prize baby of Burma, thanks to Mellin's Food, on which he has been fed since he was six weeks old. The photo was taken when he was only five months. I trust that the photo as an advertisement will speak for itself out in this land of banishment, and prove what a boon "Mellin's Food" is for infants.

Yours truly,
MARY PRICE.

15, *Royal Street,*
Calcutta.

MISS TAYLOR.
(Aged 8 months.)



Courtallum
Tinnevelly Dist
South India
12th December 1893

Dear Sir,

I have much pleasure in sending you a photo of my daughter Gladys who is just eight months old. She has been fed on Mellins Food with Goats Milk. As I have a deal of travelling to do in villages where no fresh milk can be procured, I have begun giving her your 'Lacto Glycose', really this is such a convenient food to take about, & it has saved me no end of anxiety. Gladys thrives nicely on it. I cannot speak too highly of your food, & of your biscuits which she enjoys.

Yours Sincerely
Eleanor Taylor

MISS C. MAY TEMPLE.
(Aged 6 months.)

4 Oct 93

38 Queens Road
Bayswater

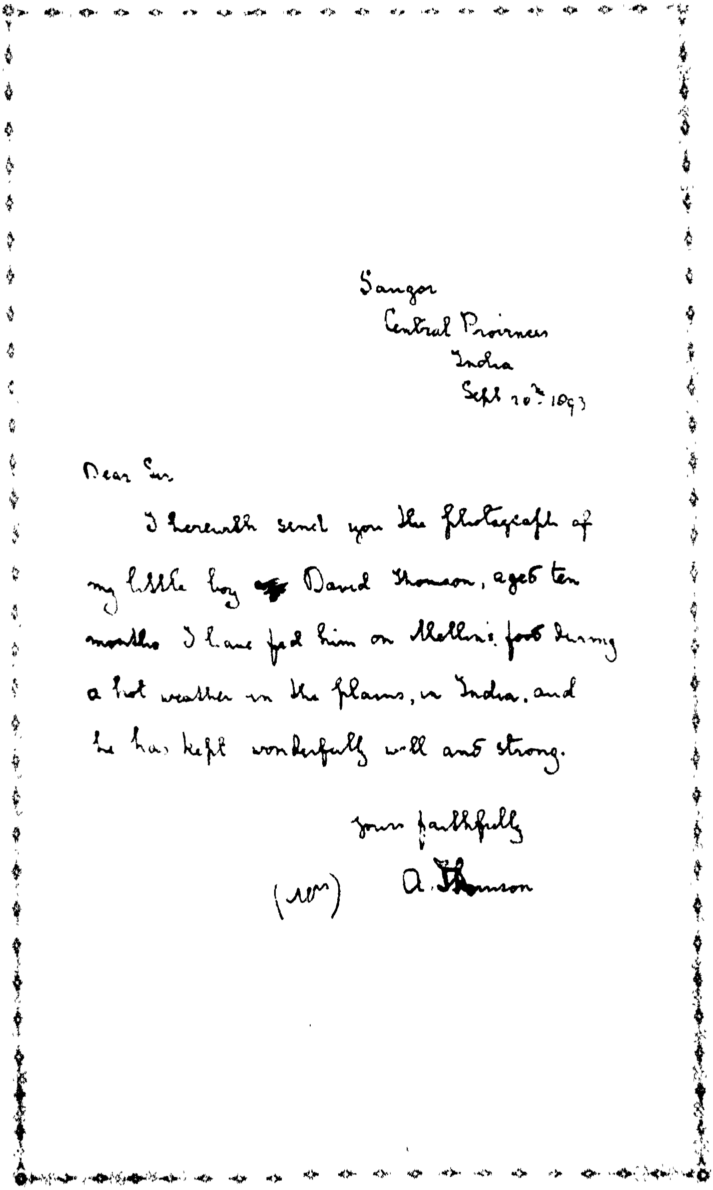
Sir

I enclose 2 photos of my little girl 'Cynthia May' as I think you may like to see what your Food for Infants has done for a baby who could not ~~feed~~ thrive on anything else at 2½ months she was the mere skeleton, weighing little thing. I persuaded my doctor (in Calcutta) to let me try your Food he thought her too young but allowed her to try it as a trial since then she has done splendidly. She is now 7 months and is nearly

and [illegible] a [illegible] among [illegible] we came home from India 3 months ago, she still takes Mellin's as the staple of her food

I am Sir
Yours Truly
R. C. Temple

MASTER DAVID THOMSON.
(Aged 10 months.)



Saugor
Central Provinces
India
Sept 20th 1893

Dear Sir,

I herewith send you the photograph of my little boy David Thomson, aged ten months. I have fed him on Mellin's food during a hot weather in the plains, in India, and he has kept wonderfully well and strong.

Yours faithfully
(Mrs) A. Thomson

SOPHY FATEY

1, *Westfield Terrace,*
Ballatern,

Aug. 22nd, 1894.

Dear Sir,

I think you will be interested to see the enclosed photograph, and may wish to use it as an advertisement for your wonderful Food. The child is a little girl from Agra, India. She was picked up and laid in a basket on my doorstep early last year. I sent her to an Orphanage five miles from Agra, and the wife of the Superintendent, Rev. A. H. Wright, C.M.S., has written to me lately, enclosing the little girl's picture, and she says, " Sophy Fatey, just as she is, she was but skin and bone, and we feared dying ; as a last hope we gave her Mellin's Food, and the result was wonderful."

Yours faithfully,

SOPHIA BLAND.

MISS C. MAY TEMPLE AND AYAH.

(*See p.* 124.)

PART III.

DIRECTIONS FOR THE PREPARATION
OF
MELLIN'S FOOD
IN

Guzerati
Marathi
Telugu
Persian
Sindhi
Urdu

GUZERATI.

બાળકો તથા અશક્ત માણસોને માટે
મેલીને બનાવેલો ખોરાક.

પાણી નાખેલા ગાયના દૂધમાં નીચે કહ્યા પ્રમાણે મેળવીને આપ્યો હોય તો એ માના દૂધની ગરજ ઉત્તમ રીતે સારે છે. બાળકો તથા અશક્ત માણસોને માટે એ ઉત્તમ ખોરાક છે એવું શ્રેષ્ઠ વૈદોનું કહેવું છે.

ગરમ કે ભેજવાળી હવાથી ન બગડે એવો ખોરાક તે આજ છે. કારણ અનાજના દાણાને સૂકવી કોરા કરી પાણીમાં મળી જાય એવો તેનો એ રસ છે અને તેમાં જીવતા બીજ બિલકુલ નથી.

મેલીને બનાવેલો ખોરાક બાળકો તથા અશક્ત માણસોને માટે ઉત્તમ શા માટે છે તેનાં કારણો.

૧.—મેલીને બનાવેલો ખોરાક દૂધમાં મેળવ્યો હોય તો તે કુદરતી ખોરાકના જેવો સંપૂર્ણ ખોરાક થાય છે. અને તેમાં આખા શરીરની પુષ્ટિ તથા આધારને માટે જોઈતા સઘળા પદાર્થો છે.

૨.—મેલીને બનાવેલા ખોરાકમાંના પદાર્થો એવી સ્થિતિમાં છે કે તે એકદમ શરીરના જીવતા લોહીની સાથે મળી જાય છે.

૩.—મેલીને બનાવેલો ખોરાક રસાયણશાસ્ત્રના તથા શરીરશાસ્ત્રના નિયમો પ્રમાણે તૈયાર કરેલો છે.

૪.—મેલીને બનાવેલો ખોરાક લોટનો બનાવેલો નથી તેમજ તેમાં સ્ટાર્ચ નથી.

૫.—મેલીને બનાવેલા ખોરાકમાં બરૂમાં જે ખાંડ હોય છે તે નથી.

૬.—મેલીને બનાવેલો ખોરાક કાંઈ કાચા અનાજના દાણા મસળીને અનઘડ રીતે તૈયાર કરેલો નથી.

૭.—મેલીને બનાવેલો ખોરાક સારામાં સારા જવ તથા ઘઉના ભેઢમાંથી લીબીગની ક્રિયા મુજબ શુદ્ધ શાસ્ત્રીય રીતે તૈયાર કરેલો છે

૮.—મેલીને તૈયાર કરેલો ખોરાક પાણીમાં મળી જાય એવો છે અને તેમાં ડાળાં કે ન પચી શકે એવો કોઈ પણ પદાર્થ મુદલ નથી.

૯.—મેલીને બનાવેલા ખોરાકની બનાવટમાં નીરોગી માણસોના શરીરમાં સ્ટાર્ચવાળા પદાર્થો જે સ્થિતિમાં પચે છે તેવી સ્થિતિ રાખ્યાથી એ ખોરાકના દાણામાં જે સ્ટાર્ચ છે તેમાં તદન ફેરફાર થઈ ગયેલો છે.

૧૦.—મેલીને બનાવેલો ખોરાક મજબૂત ને તંદુરસ્ત તેમજ નિર્બળ અને રોગી માણસોને જેવી રીતનો જોઈએ તેવી રીતનો સમજૂતીમાં કહ્યા પ્રમાણે તૈયાર કરી શકાય એવો છે.

૧૧.—મેલીને બનાવેલો ખોરાક સ્વભાવે એલકલાઈન છે તેથી અશક્ત માણસોમાં અપચો થઈ શકતો નથી.

૧૨.—મેલીને બનાવેલા ખોરાકને લીધે બાળકોને તેમજ અશક્ત માણસોને ગાયનું દૂધ પચાવવું સહેલું થઈ પડશે.

૧૩.—મેલીને બનાવેલા ખોરાકથી માનું દૂધ વધે છે તેમજ તે વધારે ગુણકારી થાયછે

૧૪.—મેલીને બનાવેલો ખોરાક માના દૂધની સાથે પણ આપી શકાય એમ છે, અને એથી ધાવણ છોડાવવાનું કામ વધારે સુતરૂં થાયછે.

મેલીને બનાવેલો ખોરાક કેમ વાપરવો તેવિષે સમજૂતી.

૧.—ત્રણ મહિનાની અંદરનાં તથા નાજુક બાંધાનાં છોકરાં માટે.

૧.—પા પાઈન્ટ (ધાવવાની અડધા શીશીપુર) પાણી લેવું. અને તેમાંથી એક ટેબલ સ્પૂન જેટલું (એક ઔંસ) જુદી નાની રકાબીમાં રેડવું.

૨.—પછી તેમાં એક ટેબલ સ્પૂન જેટલો મેલીને બનાવેલો ખોરાક નાખવો. અને તેને દેવતાની સહેજ આંચ ઉપર મૂકી હલાવી હલાવી પાણીમાં મેળવી દેવો.

૩.—પછી તેમાં પા પાઈન્ટ (ધાવવાની શીશી ભરાય એટલા સારૂ) ગાયનું તાજું દૂધ અને જે પાણી બાકી રહ્યું હોય તે ઉમેરવું. અને તે જોઈએ તેટલું ગરમ કરવું.

૨.—ત્રણ મહીનાથી મોટી ઉમરનાં છોકરાંમાટે.

૧.—મેલીને બનાવેલો ખોરાક એક ટેબલ સ્પૂન ભરીને લેઈ તેને ચાર ટેબલ સ્પૂન જેટલા પાણીમાં ઉપર બતાવ્યા મુજબ મેળવવો.

૨.—પછી તેમાં અડધો પાઈન્ટ થવા માટે જેટલું જોઈએ તેટલું ગાયનું તાજું દૂધ ઉમેરવું અને તેને જોઈતું ગરમ કરવું.

૩.—માતાઓને માટે અગત્યની ખબર.

૧.—ખોરાક કેટલો જોઈએ. ? ઉપર સમજૂતીમા જે માપ બતાવ્યું છે તેટલુ ધાવવાની શીશી ભરાવા માટે બસ થશે. અને એટલો ખોરાક ત્રણ કે ચાર મહીનાના બાળકને એક વખત ખાવાને માટે બસ છે. એટલું બધું એકી વખતે બાળક ખાઈ ન શકે તો, બાકી વધે તે ફેંકી દેવું, કારણ તેને ફરીથી ગરમ કરતાં તે ખાટું થઈ જાય અને ખાવાના કામમા ન આવે. તૈયાર કરેલો ખોરાક ધાવવાની શીશીમા ભરવો અને બધો ખોરાક થઈ રહેતા સુધી બાળકને તેમાથી ચૂસવા દેવું. શીશીમાનો બધો ખોરાક થઈ રહેવાં પહેલાં બાળક ધરાયું છે એમ જણાય તો તેને વધારે પાવાની તાણ ન કરવી. વધારે ખોરાક લેવાની બાળક આનાકાની કરવા માંડે એટલે સમજવું કે તેને જોઈતો ખોરાક તેણે લીધો છે. બાળક ખાઈ રહે એટલે તરત શીશી આઘી ખસેડી લેવી. ખાલી શીશી ચૂસવાથી બાળકને નુકસાન થાય એમ છે. કારણ એથી તેઓ હવા ચૂસે છે અને પછી તેને બેચેની લાગે છે.

૨.—કેવું દૂધ વાપરવું ખોરાક બનાવવામાં જે દૂધ વાપરવું તે જોઈએ તેના કરતાં વધારે ગરમ ન કરવુ. ઉકાળવાથી દુધ સહેજ ન પચે એવું થઇ જાય છે. માટે દૂધ ઉકળતુ ન થાય તેની ઘણી સભાળ રાખવી. ઉન્હાળામા તેને ઠંડી જગામાં રાખવું; નહિ તો તાજા દૂધમા એક ચપટીભરી બાઈકારબોનેટ ઓફ પોટાશ નાખી તેને થોડા સેકન્ડ સુધી હલાવવું અને પછી તેને જે વાસણમાં રાખ્યુ હોય તે વાસણને તાજા પાણીના વાસણમાં ડબોવવું. દૂધ ઘણુ સારૂં હોય અથવા બાળકમાં અપચાના ચિન્હ જણાતા હોય તો દૂધ ઉપરની તર થોડી કાઢી નાખવી, બાળકો પોતાનો સ્વાભાવિક ખોરાક લેતાં પણ કંટાળો ખાય છે બાળક ઓકે તેમાં જો ખટાશનો વાસ આવતો હોય તો ખોરાક આપતી વખતે દરેક શીશીમાં ચપટી ભરીને બાઈકારબોનેટ ઓફ પોટાશ નાખવો. દરવખતે નવું ગાયનું દૂધ મળી શકે ત્યાંસુધી કોઈપણ જાતનું ઠરેલુ દૂધ વાપરવું નહિ. ઠરેલું દૂધ વાપરવુજ પડે તો જે જાતનું દૂધ ખાંડ નાખ્યા વિના તૈયાર કર્યું હોય તે જાતનું દૂધ વાપરવું. નહિ તો ગળપણ અતિશય થઈ જશે.

૩—ખોરાક કેટલો ગરમ જોઈએ. એ ખોરાક છોકરાંને છેક તાઢો આપવો નહિ, કારણ તેવો એ છોકરાને ભાવતો નથી તેમ તેમને તેવો ઉપયોગનો પણ નથી. બાળકને આપ્યા પહેલા માએ કે દાઈએ જાતે તે થોડો પી જોવો અને જો તે મ્હોંમાં સુખવળે એટલો ગરમ હોય તો જાણવુ કે એ જેટલો ગરમ હોવો જોઈએ તેટલો ગરમ છે. ખોટીરીતે મેળવ્યાથી કે કાંઈ ઢાલ થયાથી તાઢો પડી જાય તો જે શીશીમાં કે વાસણમાં તે રાખ્યો હોય તે શીશી કે વાસણ ઉના પાણીના એક મોટા વાસણમાં થોડી મિનિટ સુધી રાખી મુકી ખોરાક ઉનો કરવો. આ ખોરાકને રાતમાં ઉનો રાખી મુકવો નહિ. રાતમા બાળકને ખવાડવાની જરૂર પડે તો જેટલો જોઈએ તેટલો તાઢો તૈયાર કરવો અને ખપ જેટલો બાળકને આપતાં પહેલાં તરત ઉનો કરી આપવો.

૪—ધાવવાની શીશી, અને નળી એ બંને ખુબ કાળજીથી સાફ રાખવાં. દરએક વખતે ખવડાવ્યા પછી તરતજ તે બંનેને ધોઈ લુંછી લાણા બીજી વખતે ખપ પડતાં સુધી તાઢા પાણીમાં રાખી મુકવા. બે શીશી રાખી હોય તો ઘણું સારૂં; કારણ કે વારા ફરતી વાપરી શકાય.

૫—બાળકના શરીરના બાંધાના પ્રમાણમા તેને વધતો ઓછો ખોરાક જોઈએ છીએ. કેટલાક બાળક તદુરસ્ત, મજબૂત ને સંપૂર્ણ બાંધાના હોય છે ને કેટલાક રોગી, નાકૌવત ને કસવિનાના હોય છે આથી આ ખોરાક દરેકને આટલોજ જોઈશે એમ નિશ્ચય કહેવાય નહિ. કેટલાક છોકરાને બીજાઓના કરતાં બમણો જોઈએ. આથી આ ખોરાક તૈયાર કરવામાં તથા મેળવવામાં માએ તથા દાઈએ પોતાની નજર પહોંચાડવી. પહેલાં બે ત્રણ અઠવાડીયા સુધી ખવડાવવુ તે માફકસર તથા વારે વારે ખવડાવવુ. આટલી ઉમરના બાળકોને દર બે બે કલાકે છ કે આઠ ટેબલસ્પૂન ભરીને ખોરાક આપ્યો હોય તો બસ છે, અને પછી બાળક જેમ જેમ મોટું થતુ જાય તેમ તેમ ખોરાક વધારવો. એક વખતને માટે બસ લગતો હોય એટલો ખોરાક આપ્યા પછી પણ બાળક ધરાયલુ ન જણાય તો થોડો ખોરાક લઈ તેમાં તેટલું પાણી નાખી તે આપવો. અને દૂધ વાપરવું તેમાં પહેલાં કરતાં જરા ઓછું પાણી મેળવવું. પણ જો બાળકને ખોરાક ભારે પડે છે એમ જણાય તો સમજુતીમાં કહ્યો છે તેના કરતાં ખોરાક જરા ઓછો લેવો અને દૂધમાં પાણી સહેજ વધારે નાખવું. દરેક બાળકને માટે ખોરાક પાણી તથા દુધ કયા પ્રમાણમાં લેવાં એ બારીક નજર રાખ્યાથી તથા વારે વારે તપાસ કર્યાથી જણાઈ આવશે.

૬.—જ્યારે એમ જણાય કે આ ખોરાક સદતો નથી ત્યારે એમા દૂધનો કે બનાવવની રીતનો કે ખોરાક જે રીતે ખવાડવામાં આવ્યો હોય તેનો કે કોનો વાંક છે તે બાબત માતાએ કે દાઈએ પોતાની ખાતરી કરી લેવી. એમ પણ બન્યું હોય કે એક વખત ખોરાક જોઈએ તેના કરવાં વધારે આપ્યો હશે અથવા તો ખોરાક જોઈએ તેના કરતાં વધારે વાર અપાયો હશે, અથવા તો વાંક બધો ધાવવાની શીશીને ચોખ્ખી ન રાખ્યાનો હશે. દુર્ભાગ્યે આ છેલ્લી ભૂલ ઘણી વખતે થાય છે. અવશ્યે જ્યારે આ ખોરાક તૈયાર કરવાનું કામ ચાકરોના હાથમાં હોય છે ત્યારે એ વાત તો નિઃસંશય છે કે બાળકોને મંદવાડ આવે છે તેમાંનું મુખ્ય કારણ આ છે. પહેલવહેલાં થોડા વખત ખોરાક આપ્યાથી દસ્ત પાતળું થાય તો તેથી બાળકને મરડો થયો છે એમ ન સમજવું, તેમ તેથી ગભરાવવું પણ નહી કારણ, બાળકનું દસ્ત પાતળુ હોવુ જોઈએ. અને એક બે દિવસમાં પાછું નિયમસર આવવા માંડશે.

કેટલીક વખતે એમ બનેલું છે કે આ ખોરાક લીધા પછી બાળકના દસ્તમાથી દુર્ગંધ નીકળતી હોય એમ લાગે છે. બાળકને ન જોઈએ તેટલો કે ન જોઈએ તેવો ખોરાક આપ્યાથી આમ બને છે એવો ખોરાક બાળકના આંતરડામા ભરાઈ રહી કોહે છે અને પછી તેને આ ખોરાક બાહાર હડસેલી કાઢે છે. જો આમ બન્યા કરે તો જે દૂધ વાપરમા લેવુ હોય તેમાંથી તરી કાળજીથી કાઢી નાખવી અને આ ખોરાક તૈયાર કરવામાં વાપરવા પહેલા તેમાં વધારે પાણી નાખવું.

ઘણા લોકો એમ ધારે છે કે જાડો ખોરાક વધારે પુષ્ટિકારક છે પણ એ ધારવું ભૂલભરેલું. માનુ દૂધ ઘણુંજ પાતળુ હોય છે પણ તે તંદુરસ્ત અવસ્થામાં ઉત્તમ ખોરાક છે, જાડો પદાર્થ બિલકુલ પચતો નથી. અને તેથી તેનાથી પુષ્ટિ મળતી નથી મેલીને બનાવેલા ખોરાકનો એક ફાયદો એ છે કે તેને મેળવ્યા પછી તે પાતળો પ્રવાહી પદાર્થ થાય છે અને તે ઘણો પુષ્ટિકારક હોય છે

૪.—અશક્ત માણસો તથા જે માતા પોતાના છોકરાંને પોતે ખવાડતી હોય તેને માટે સમજુતી.

૧.—એક ટેબલ સ્પુન જેટલો મેલીને બનાવેલો ખોરાક લઈ તેને ચાર ટેબલ સ્પુન જેટલા ઉના પાણીમાં મેળવવો.

૨.—પછી નહિ ઉકાળેલું એવુ એક પ્યાલો ભરાય એટલું ગાયનું દૂધ ઉમેરવું. આટલો ખોરાક દિવસમા જોઈએ તેટલી વાર આપવો, વધારે આપવામાં પણ હરકત નથી. મેલીને બનાવેલા ખોરાકની સાથે દૂધ ભેળ્યાથી નર્યાં દૂધ કરતાં તે વધારે વહેલું પચે છે પણ આમ કર્યાથી અપચો જણાય. તો તેમાં પાણી ઉમેરવું અથવા તો મેલીનના ખોરાકને પાણીમાંજ મેળવવો.

જે માતા પોતાનાં છોકરાંને પોતે ધવાડતી હશે તેને મેલીનનો ખોરાક ઘણો સારો માલમ પડશે. અવશ્યે જ્યારે તે પોતે પોતાને જોઈયે તેટલો સાધારણ ખોરાક નહિ લઈ શકતી હોય ત્યારે. મેલીને બનાવેલો ખોરાક લીધાથી માતાનું દુધ વધારશે તેમજ તે વધારે પુષ્ટિકારક થશે.

સર્ટિફિકેટો.

ડાકતર પુસ્ટેસ સ્મિથ, બેલજીઅમના રાજાનો એકસ્ટ્રા આરડીનરી વૈદ.

૫. જ્યોર્જ સ્ટ્રીટ, હાનોવર સ્કવેર;
તા. ૧૭ મી મે સન ૧૮૭૦

બાળકોને માટે તમે જે ખોરાક બનાવ્યો છે તે મારા જાણ્યા મેળે એવી જાતના બીજા ખોરાકો કરતા ઘણોજ સરસ છે. બાળક તંદુરસ્ત હોય કે રોગી હોય તો પણ તે બંનેને એ સરખા રીતે માફક આવતો જણાય છે. અને ઘણે ભાગે છેક નાનાં બાળકોને તે ભારે પડતો નથી. જે ખોરાક આવી રીતનો માલમ પડયો છે તેના વખાણ કરવાને વધારે કહેવાની જરૂર નથી. અને હાલમાં એનો ખપ ઘણોજ થઈ પડયો હશે એ બાબત મને બિલકુલ શક રહેતો નથી.

પુસ્ટેસ સ્મિથ. એમ. ડી.

જોન ટેનર, ફેરીંગડન જનરલ ડિસ્પેન્સરી તથા લાઈંગ ચારીટીમાંનો ઓબ્સ્ટેટ્રિક ફીઝીશીઅન, રાયલ સોથ લન્ડન ડિસ્પેન્સરીનો માજી વૈદ, અને હોર્સમન્ગર લેન જેલનો ડેપ્યુટી મેડિકલ ઓફીસર.

આલ્ફ્રેડ હૌસ. ૧૧૮, ન્યુઈંગટન કોઝવે. એસ. ઈ.
તા ૧૬ મી જાનેવારી સને ૧૮૬૯.

બાળકોને માટે જે બીજા લોકોએ ખોરાક બનાવેલા છે તેની સાથે તમે બનાવેલા ખોરાકને પણ મે અજમાવી જોયો છે અને મારી હવે પુરેપુરી ખાતરી થઈ છે કે બાળકના શરીરનું બંધારણ જલદીથી તંદુરસ્ત થાય એવા પુષ્ટિકારક ગુણો તમે બનાવેલા ખોરાકમાં છે તેવા બીજા કોઈનામાં નથી આટલા સારૂ હું હમેશાં બીજા ખોરાકો કરતાં તમે બનાવેલા ખોરાકને વધારે પસંદ કરૂંછું.

જોન ટેનર એમ. ડી.

બર્કેલી હીલ, એમ. ડી., એફ. આર. સી. એસ. યુનિવરસીટી કોલેજ હોસ્પિટલમાંનો ક્લિનિકલ પ્રોફેસર, યુનિવરસીટી કોલેજ હોસ્પિટલમાંનો સર્જન

૫૫, વિમ્પોલ સ્ટ્રીટ. તા ૧૬ મી ડિસેંબર સને ૧૮૭૦.

કેટલીક વખતે તો જે બાળકો બીજો કોઈપણ જાતનો ખોરાક લઈ શકતાં નહિ તેમને તમે બનાવેલો ખોરાક આપી હું તેમનો જીવ બચાવી શક્યો છું, એવું એક વખત બન્યુ નથી કે તમે બનાવેલો ખોરાક લઈ તૈયાર કરેલો ખોરાક દરદીને સદયો નથી. અને બાળકોને માટે તો એ ઘણોજ પુષ્ટિકારક ખોરાક નીવડયો છે.

હું ધારૂં છું કે તમે બનાવેલો ખોરાક દાકતરોને તેમજ લોકોને વધારે જાણીતો થશે ત્યારે તેનો ખપ ઘણોજ વધી પડવાની તમે સારી આશા રાખી શકો.

બર્કેલી હીલ એફ. આર. સી એસ

ખરી નકલ.

મેસર્સ કેમ્પ અને કમ્પની. હિંદુસ્તાનમાંના આડતીઆ. ઉદેપુર તા. ૧૨ મી ફેબ્રુઆરી ૧૮૭૨.

ગૃહસ્થો. બાળકોને માટેના મેલીને બનાવેલા ખોરાકના બે ડઝન બાટલી મારા ઉપર મોકલાવશો. તમે અમારે મોકલી હતી તેવીજ. વિલસન એન્ડ કમ્પની અમદાવાદ, એ રીતે સરનામું કરજો.

આ ખોરાકનું વખાણ ઘણું થયું એમ કહી થાયજ નહી. મારા બાળકનો એથી જાન બચ્યો છે. એ તો વાત ખાતરીની છે ગયા મહિનામાં આશરે ત્રણ અઠવાડીઆં સુધી અમારી પાસે એમાંનો ખોરાક બિલકુલ ન હોતો. અને તેથી મારા બાળકને પહેલાંના પેઠે અરૂચી થવા લાગી. તેને આ ખોરાક ફરીથી આપવા માંડયો અને આપવા માંડયા પછી બે દિવસમાં તે પાછી પહેલાં હતી તેવી સારી થઈ.

હાલમાં હું એ ખોરાક એક ૫૬ વર્ષના દરદીને આપુંછું એ દરદી પહેલા ઘણોજ માંદો હતો. અને મારી દવા કરવા માંડયા પહેલાંના પંદર દિવસ સુધી તેના પેટમાં કોઈપણ ખોરાક બિલકુલ રહી શકતો ન હોતો આ ખોરાક મેં તેને આપવા માંડયો ત્યારથી તેને અરૂચિ તો જણાતીજ નથી. અને એ દરદીને સારા થવાની મારી આશા ઘણે ભાગે આ ખોરાક ઉપરજ છે. એ ધર્મે જૈન છે તેથી માંસનો શુપ એ લઈ શકે એમ છેજ નહિ. અને તેથી આવે પ્રસંગે મારા શસ્ત્ર તમે બનાવેલો ખોરાક ઘણું અમૂલ્યનું શસ્ત્ર છે.

મેં જે આ લખ્યું છે તેનો તમારી મરજીમાં આવે તેવો તમે ઉપયોગ કરજો. એ લખ્યું છે તે એમ જાણીને કે આ અજાયબી પમાડે ,એવો ખોરાક હિંદુસ્થાનમાં પૂરી રીતે જણાયો નથી.

(સહી). આર. ડબલ્યુ. કાનગહામ એમ.ડી. સર્જન.
કેટરહામ વેલી. સરે તા. ૨૮ મી એપ્રિલ સન ૧૮૭૮.

મારા પોતાના છોકરાં તથા જે નાના દરદીઓને મેં એ ખોરાક લેવાની ભલામણ કરી હતી તેમના ઉપર એની શી અસર થઈ છે તે મેં તપાસી જોયું છે અને તે ઉપરથી મને લખવાને ખુશી થાય છે કે માનું દુધ જ્યાં મળી શકે નહિ તે વખતે આ તમે બનાવેલો ખોરાક ઘણો ઉત્તમ છે તથા બીજા કૃત્રિમ ખોરાકોના કરતાં એ ઘણો ચઢીઆતો છે એમ હું માનુંછું.

બરાબર સંભાળથી એ આપ્યો હોય છે તે તે હમેશાં સદે છે એમ મને જણાયું છે અને તેથી જલદીથી મજબૂત માંસમાં વધારો થાય છે.

એ ગરમ પાણીમાં બરાબર ભળી જાય છે તેથી બાળકને માટે ખોરાક તૈયાર કરવાનું કામ ઝડપથી તથા સેહેલથી થાય છે એટલુંજ નહિ પરંતુ જે લોટમાંથી એ ખોરાક બનાવેલો છે તેમાંનો સ્ટાર્ચ સહેલથી પચી શકે એવી ખાંડના રૂપમાં આણી મુકયો છે તે એ બતાવે છે આથી બાળક જે પદાર્થને પચાવવાને પુરેપુરૂ શક્ત હોતું નથી તથા જેથી તેના શરીરને નુકસાન થાય છે તેને તે પદાર્થ પચાવવાની મહેનત ઓછી થઈ જાય છે.

જે બાળકોને તેની માવિના ઉછેરવાનાં હોય તેમને આ ખોરાક આપવાની હું મજબૂત ભલામણ કરૂંછું. અને મારી ખાતરી છે કે જે ખોરાકના ગુણ ધીમે ધીમે જણાવા લાગ્યા છે તેનો ખપ અતે ઘણો વધી પડશે અને એમ થવું મારા વિચાર પ્રમાણે જરૂરનું છે.

હેનરી. આઈ. હીલીઆર્ડ એમ. ડી.

હિંદુસ્થાનમાંના આડતીઆ—કેમ્પ એન્ડ કમ્પની લીમિટેડ, ટ્રેચર એન્ડ કમ્પની, બોલ્ટન એન્ડ કમ્પની, [illegible] ઈસ્માયલ કજસ, ઈસુફઅલી સમસુદીન, ગરદઅલી હીમજીભાઈ, પી. ફિલિપ્સ એન્ડ કમ્પની, જેરેમીઆ લાયન એન્ડ કમ્પની, ડી. ચોપીઆ એન્ડ કમ્પની, એ પી. સમસુદીન, ગુલામઅલી જીવણજી એન્ડ કમ્પની, વાલ્ટર નટર એન્ડ કમ્પની, હીરજી મુલજી એન્ડ કમ્પની, જુસબ ઉસમાન, પી. એન. કેરાવાલા એન્ડ કમ્પની, મુંબઈ; બાથગેટ એન્ડ કમ્પની કલકત્તા; જે એસ લીઓસ અલાહાબાદ; ઈ. સ્ટ્રિચલી, કરાચી, સિંધ; જે મેકલંડ એન્ડ કમ્પની, કોલોમ્બો, સિલોન; જે એસ. એડ્મોર એન્ડ કમ્પની, કલકત્તા અને મુંબઈ

કિંમત ઈંગ્લંડમાં બાટલી દીઠ ૧ શી. ૬ પે. અને ૨ શી. ૬. પે.

બનાવનાર માત્ર

જી. મેલીન. માલંબરોવર્કસ. સ્ટફર્ડ સ્ટ્રીટ, પેકહામ લંડન. એસ. ઈ.

મેલીનનો લેકટો ગ્લીકોસી અથવા દૂધનો ખોરાક, ૨ શી. અને ૩ શી. બાટલી દીઠ.

મેલીનનો બનાવેલો ખોરાકના જેવોજ એ બનાવવામાં ચોખ્ખું તાજું ગાયનું દૂધ એમાં મેળેલું છે.

MARATHI.

तान्हींमुलें व अशक्तलोक यांकरितां.

मेलिनचें फूड (अन्न).

हें पाणी घालून कमकस केलेल्या गायीच्या दुधांत खालीं अनुपानांत सांगितल्याप्रमाणें मिळविलें असतां आईच्या दुधाऐवजीं मुलास फारच उपयोगी पडतें. हें मुलांस व अशक्त माणसांस उत्तम अन्न आहे म्हणून मोठमोठ्या मेडिकल (वैद्यकीय) अधिकाऱ्यांनीं ह्याची शिफारस केली आहे.

उष्ण किंवा सर्द हवेंत न बिघडणारें असें हेंच कायतें एक फूड (अन्न) आहे. हें अन्न पाण्यांत विरघळणारें धान्याचें सत्त्व आहे व तें अगदीं कोरडें होईपर्यंत सुकविलेलें आहे. यांत जीवजंतूचा लेशही नाहीं.

मुलें व अशक्त मनुष्यें यांना मेलिनचें फूड (अन्न) उत्तम कशावरून तर—

१—मेलिनचें फूड (अन्न), यांत शरीरास पोषक व पौष्टिक जीं जीं द्रव्यें लागतात तीं सर्व आहेत व हें दुधांत विरघळविलें म्हणजे अगदीं हुबेहुब आईच्या दुधाप्रमाणें बनतें.

२.—मेलिनचें फूड (अन्न), यांत जे पदार्थ आहेत ते अशा रीतीनें घातलेले असतात कीं त्यामुळें एकदम शरीरांतील रक्तामध्यें मिसळतात.

३.—मेलिनचें फूड (अन्न), हें रसायन शास्त्राच्या नियमांमध्यें व शरीरधर्मतत्त्वानुरोधानें अगदीं बरोबर तयार केलें आहे

४.—मेलिनचें फूड (अन्न), हें पिष्टमय नसून यांत स्टार्च नाहीं.

५.—मेलिनचें फूड (अन्न), यांत साखर नसते.

६.—मेलिनचें फूड (अन्न), हें धान्याचे कचे कण घेऊन ओबडधोबड रीतीनें तयार केलेलें नाहीं.

७.—मेलिनचें फूड (अन्न), हें सातूचें जंवलें व गव्हांची कणीक यांपासून लिबिगच्या रीतीनें अगदीं शास्त्रोक्तरीत्या व काळजीपूर्वक तयार केलेलें आहे.

८.—मेलिनचें फूड (अन्न), हें विरघळणारें असल्यामुळें यांत एखादा न पचण्याजोगा (अपाचक) पदार्थ किंवा टरफलें अगर भुस हीं मुळींच नाहींत.

९. मेलिनच्या अन्नांमध्यें जे पिष्टमय पदार्थ आहेत त्यांवर स्वाभाविक पचनकालीं ज्या ज्या क्रिया घडतात त्या सर्व त्यांवर कृत्रिमपणें घडवून ते सुलभ रीतीनें पचन होण्याजोगे केले आहेत.

१०—मेलिनचें फूड (अन्न), यांत दुखणाईत, अशक्त, तसेच म्हातारे व सशक्त लोकांच्या उपयोगाकरितां अनुपानांत सांगितल्याप्रमाणें फेरबदल करितां येतो.

११—मेलिनचें फूड (अन्न), यांत क्षारांश असल्यामुळें अशक्त लोकांच्या कोठ्याचा आम्लपणा व अजीर्ण मोडतें.

१२.—मेलिनचें फूड (अन्न), हें तान्ह्या मुलांची व अशक्त मनुष्यांची गाईचें दूध पचविण्याची शक्ति वाढवितें.

१३.—मेलिनचें फूड (अन्न), हें आईचें दूध व त्यांतील गुण वाढवितें.

१४.—मेलिनचें फूड (अन्न), हें मूल आईचे अंगावर पीत असलें तरी त्यास देण्यास हरकत नाहीं; व त्यामुळें मुलास आईचे [illegible] सुटण्याचें वेळ करणें सुलभ पडतें.

मेलिनच्या अन्नाचें अनुपान.

१. तीन महिन्यांच्या आंतील तान्ह्या लेंकरांकरितां व अशक्त मुलांकरितां.

१. लहान मुलास दूध पाजण्याची जी बाटली मिळते तिच्या अर्धे म्हणजे सुमारें पावशेर पाणी घ्यावें. त्यांतून १ टेबल स्पून कुल म्हणजे ४ चमचेभर पाणी एका कल्हईच्या वाटींत घ्यावें.

२. आणि त्यांत मेलिनचें अन्न दोन चमचे घालून त्यास मंद आंच देऊन आणि ढवळून तें विरघळवावें.

३. हें विरघळलेलें मिश्रण पाजण्याच्या बाटलींत ओतावें आणि त्याबरोबर पावशेरांतलें राहिलेलें पाणीही घालावें आणि नंतर त्या रीतीच्या बरोबर गाईचें ताजें दूध घालून बाटली भरावी आणि तें सगळें पुनः चुलीवर जरूर असेल तितकें गरम करावें.

२. तीन महिन्यांवरील मुलांकरितां.

१. मेलिनचें अन्न चार चमचेभर घेऊन तें ११ चमचे पाण्यामध्यें वर सांगितल्याप्रमाणें विरघळवावें.

२. नंतर त्यांत पाजण्याची बाटली भरेपर्यंत गाईचें ताजें दूध घालून तें सर्व जितकें पाहिजे असेल तितकें गरम करावें.

३. आयांना महत्त्वाच्या सूचना.

१ **अन्न पिण्याचें परिमाण.**—अनुपानांत सांगितलेलें मेलिनच्या अन्नाचें प्रमाण पाजण्याची बाटली भरेलतकें होईल. आणि हें दर तीन चार महिन्यांच्या तान्ह्या मुलास एकावेळेस बस होईल. तितकें सगळें जर लागत नसेल तर बाकीचें राहिलेलें टाकून द्यावें कारण दुसऱ्यांने ताजविण्यास तें आंबट होऊन पिण्यास निरुपयोगी होतें. पाजण्याच्या बाटलींत अन्न घालून तें संपेपर्यंत मुलास पिऊं द्यावें संपण्याचे पूर्वींच जर मुलानें पिण्याचें बंद केलें तर त्यास जुलमानें पिण्यास लावूं नये. कारण पिणें बंद करणें म्हणजे त्यास पुरें झालें असें समजावें. दूध संपल्यावर लागलीच ती रिकामी बाटली दूर करावी, कारण तशीच मुलास पिऊं दिली असतां त्याचे पोटांत हवा जाऊन त्यास पुढें फार त्रास होतो.

२. **दुधाविषयीं.**—अन्न तयार करतांना जें दूध घ्यावयाचें तें जेवढें पाहिजे तेवढेंच गरम करावें, ज्यास्त तापवूं नये. कारण जर तें कढवलें तर तें कांहींसें अपाचक होतें म्हणून त्याची उष्णता बेताचीच वाढूं नये याकरितां खबरदारी घेतली पाहिजे. उन्हाळ्यांत दूध एके बाजूस थंडपाण्यामध्यें ठेविलें पाहिजे अथवा ताज्या दुधामध्यें एक चिमूटभर बायकार्बोनेट ऑफ् पोटाश टाकून नंतर कांहीं वेळ ढवळून तें थंडपाण्यामध्यें ठेवावें. जर दूध मुलास पचत नसेल अगर तें फार कसदार असेल तर त्यावरची साय काढून टाकावी. नेहमींचें दूध पीत असतां ही मुलें कधीं-कधीं आजारी पडतात. जर अन्न परत होईल (ओकून पडेल) आणि अन्नास आंबट वास येईल तर प्रत्येक अन्नाच्या बाटलीमध्यें एक चिमटी-भर बायकार्बोनेट ऑफ पोटाश टाकावा. दूध ताजें मिळत असल्यास [illegible] वेळेस उपयोग होण्याकरितां तयार केलेल्या दुधाचा उपयोग करूं नये. जर असल्या दुधाशिवाय निर्वाह नाहीं तर साखरेशिवाय तयार केलेल्याचा उपयोग करावा; कारण साखर फार उपयोगाची नाहीं

३. **अन्नाची उष्णता.**—कूड (अन्न) अतिशय थंड असल्यास देऊं नये. कारण तें मुलास आवडत नाहीं आणि त्याचा तितका उपयोगही नाहीं. देण्यापूर्वीं आईनें किंवा दाईनें त्याचा एक घोट घेऊन पहावा. जर जरा ऊन लागून तोंडास बरें वाटेल तर तितकें ऊन पाहिजे; जर कदाचित मिश्रणामध्यें चुकल्यानें किंवा दुसरें कारणानें थंड होऊन जाईल तर न्हाईं किंवा पाजण्याची बाटली ऊन पाण्यांत एक दोन मिनिटें ठेवून तें गरम करावें. रात्रभर हें एकसारखें गरम ठेवून उपयोगाचें नाहीं जर जरूर असेल तर जेवढें पाहिजे तेवढें थंडच तयार करून लागेल तसतसें थोडेसें गरम करून मुलास द्यावें

४. पाजण्याची बाटली व नळी विशेष चिकित्सापूर्वक स्वच्छ ठेवली पाहिजे. प्रत्येक वेळेस ती नळाचें नाक पुसून काढावी आणि पुनः उपयोग करीतोंपर्यंत थंड पाण्यांत ठेवावी दोन बाटल्या असणें फार चांगलें, कारण एका वेळेस एक आणि दुसऱ्या वेळेस दुसरी अशा क्रमानें उपयोग करण्यास सांपडेल.

५. मुलाच्या प्रकृतीच्या मानानें हें अन्न कमी ज्यास्त द्यावें लागतें कारण कांहीं मुलें निरोगी व सशक्त असतात व कांहीं सदा दुखणेकरी, अशक्त आणि कसहीन असतात यामुळें त्यास अन्नाचें एकच प्रमाण सांगतां येत नाहीं. कांहीं मुलांचा आहार [illegible] दुसऱ्या पोरापेक्षां दुप्पट असतो प्रयोग आयांनीं व दायांनीं या मिश्रणाचा उपयोग करण्यामध्यें फार पथ्या मनापासनें वागणें जरूर आहे. पहिल्या दोन तीन आठव-ड्यामध्यें हें अन्न बेतानेंच पण पुष्कळ वेळां द्यावें. प्रत्येक २ तासास २४-३१ चमचेभर दिलें असतां बस आहे. जसें मूल वाढत जाईल तसें त्याचें प्रमाणही वाढवावें. जर एवढ्यानें तृप्ति होत नाहीं आणि मूल भुकेलेलें रडेल तर अन्नाचें प्रमाण वाढवावें आणि पाणी कमी करून दूध ज्यास्त घालावें. जर हें ज्यास्त कसदार होईल आणि मुलास पचत नसेल तर याचा अंश कमी करावा आणि पाण्याचा भाग वाढवून दूध कमी करावें अशा रीतीनें कांहीं दमानें व विचारानें अनुभव घेतला असतां व्यक्तिमात्रास किती दूध द्यावें व अन्न घालावें याचें अनुमान सहज काढितां येणार आहे.

६. अन्न पाचन नसेल तर हा दोष दुधामध्यें आहे कीं मिश्रणाच्या कृतींत आहे कीं अन्न देण्याच्या रीतींत आहे कीं काय हें दाईनें किंवा आईनें विचार करून ताडलें पाहिजे अन्न एकदम जास्त दिलें असेल किंवा थोड्या अवकाशांत फारवेळां दिलें असेल किंवा पाजण्याचीं उपकरणीं (भांडीं वगैरे) स्वच्छ ठेविलीं नसतील तर यापैकीं कोणती चूक आहे ती पाहिली पाहिजे. साधारणतः भांडीं स्वच्छ न ठेवणें ही चूक नेहमीं घडून येणारी आहे आणि विशेषेंकरून जेथें मुलांचें कामकाज नोकराकडे सोपविलेलें असतें तेथें तर ही चूक फार आढळते म्हणून मुलांचे पुष्कळ रोग या कारणावरूनच उद्भवतात असें बहुधा [illegible] ठरविता येईल.

प्रथम थोड्या वेळानंतर मुलास बरेच पातळ परसाकडेस झालें तर घाबरूं नये कारण ती कांहीं हगवण नव्हे. मुलास कांहींसे पातळच परसा-कडेस झालें पाहिजे म्हणजे हें अन्न मुलास दिल्यावर थोड्याच दिवसांत पूर्वींच्या रंगरूपास येतें.

कांहीं वेळां हें घेऊं लागल्यानंतर मुलांच्या परसाकडेस घाण येऊं लागते. जेथें अयोग्य पदार्थ खाण्यास दिले जातात तेथें असें होण्याचा संभव आहे कारण तें अन्न न पचून कोठ्यांत तसेंच बसतें व कुजतें आणि या अन्नाबरोबर बाहेर येतें, परंतु अशी गोष्ट कांहीं दिवस चालत जर होत जाईल तर मात्र अन्न तयार करतेवेळीं दुधावरची साय काढून टाकावी आणि पाणी ज्यास्त घालावें.

अन्न जितकें दाट तितकें ज्यास्त पौष्टिक असें जें सामान्य समजून आहे ती भ्रांतिमूलक आहे. आईचें दूध अगदीं पातळ पण तें निरोगी असलें तर फारच पौष्टिक आहे. जितकें अन्न जड तितकें पचविण्यास कठिण म्हणून पौष्टिकही कमीच मेलिनच्या या अन्नांत एवढी खुबी आहे कीं तें विरघळलें असतां आईच्या दुधाप्रमाणें फार पातळ व फार पौष्टिक असें अन्न तयार होतें.

४. आजारी लोकांकरितां व अंगावर पाजणाऱ्या दाया व आया यांकरितां सूचना.

१. सुमारें चार चमचेभर म्हणजे एक टेबलस्पून कुल किंवा थोडेसें ज्यास्त मेलिनचें अन्न चार चमचे ऊन पाण्यांत विरघळावें.

२. नंतर पावशेर किंवा थोडेसें ज्यास्तच निरसें दूध त्यांत मिळवावें. हें अन्न पुष्कळ वेळां दिवसांतून घ्यावें अथवा आवश्यक वाटेल तितक्या वेळां घ्यावें. एकवेळेपेक्षां मेलिनचें अन्न देत असतांना दूध फार पचतें. परंतु तें न आवडलें किंवा त्यापासून उलट त्रास झाला तर दूध मिश्रणांत अगदींच थोडें घालावें किंवा दूध अगदीं न घालतां निव्वळ पाण्यांतच अन्नाचें मिश्रण करावें.

मेलिनचें अन्न हें अंगावर पाजणाऱ्या दायांस फार उपयोगी पडेल आणि मुख्यत्वेंकरून ज्यांच्यानीं बेताचेंच अन्न [illegible] तितकें खाववत नाहीं अशांना विशेष उपयोगी आहे. हें नेहमीं घेतलें असतां त्यांचें दूध ज्यास्त कसदार व पुष्कळ येतें.

TELUGU.

మెల్లిన్‌దొరచేత ఏర్పరచపడిన శిశువులగురించి మరిఅశక్తులకునుఉపయోగమయినఆహారము.

పురుగు చెత్త మొదలైనవాటినుంచి విడదలచేసి చక్కగానెండించి జలుబు ఘూలిచేతవిశోధించనిధాన్య సత్వము ఆవుపాలలో పలావగాకరిగించిన ఆహారమేయొకటి.

తల్లిపాలకు ఉచితమయిన ప్రత్యామ్నాయమని మరి అశక్తిరోగిష్టులకును మేలైనదని ఘనవైద్యాధికారులవలన శ్లాఘింపబడినది.

మెల్లిన్ ఆహారము శిశువులకు మరి అశక్తులకు ఉచితమైనది అనగా:—

౧ మెల్లిన్స్ ఆహారము, పాలలోకరిగి ప్రకృతికి సాంగమైయుండి కోరిన అన్నధారకసారము కలదైనది.

౨ మెల్లిన్స్ ఆహారము, త్వరితములోనె వెట్లా రక్తదాహమును వృద్ధిపొందించె తత్వముకలది.

౩ మెల్లిన్స్ ఆహారము, ఖండితమైన పదార్థతత్వవివేచక శాస్త్రసంబంధమైన మూలసూత్రములయందున్ను మరీ ఆవుపథశాస్త్రసూత్రములయందు చెప్పబడినక్రమముతో ఉద్యుక్తమైనది.

౪ మెల్లిన్స్ ఆహారము, నూకలు లేనిదై బాగుగా గంజిలేదైనది.

౫ మెల్లిన్స్ ఆహారము, స్వమాధుర్యము వినహా చేసే శర్కరాది తీపులుగలదికాదు.

౬ మెల్లిన్స్ ఆహారము, పచ్చిఅన్నపు గింజలను దుద్ది అపక్వముగా వండినదికాదు.

౭ మెల్లిన్స్ ఆహారము, మహాజాగ్రతతో శాస్త్రోక్తమైన “ లిబిగ ” పద్ధతిని అనుసరించి మంచి శాల్యగోధుమల పిండితో చేసినది.

౮ మెల్లిన్స్ ఆహారము, పొట్టుకలిసి అజీర్ణకరమైనదిగాక బాగుగా కరిగే ఆహారము,

౯ మెల్లిన్స్ ఆహారము, ధాన్యములకుకలిగే గంజియొక్క పరివర్తనములులేనిదిగా చేయబడి వయస్సుగలవారికి యుండే సహజమైన అన్నపాచక నియమములను కలగచేసేలాగున అనుకరించబడినది.

౧౦ మెల్లిన్స్ ఆహారము, విడిగలవారు తథారోగిష్టుల కోరికల చొప్పున ఉద్యుక్తమైనది.

౧౧ మెల్లిన్స్ ఆహారము,(అల్కలైన్)క్షారకరమైనదై అశక్తులకు కలిగేఅజీర్ణపులితేప్పుల పర్యవసానమునుఅణచతగినది

౧౨ మెల్లిన్స్ ఆహారము, శిశువులు మరి రోగిష్టులు(ఆవు) పాలు బాగా పచనముచేసుకొనె శక్తినిపెంచుచుంది.

౧౩ మెల్లిన్స్ ఆహారము, తల్లియొక్క పాలు మిక్కిలి కలిగె యోగ్యతను అభివృద్ధిచేయతగినది.

౧౪ మెల్లిన్స్ ఆహారము, ఏక కాలమందు తల్లి పాలులో కాగించి రెండో మారు అనాయాసముగా తల్లిపాలును విడిపించగలది.

మెల్లిన్ ఆహారము వినియోగమును గురించి వృత్తరవు.

మూడు మాసముల లోపైన యీడుగల మరి సుకుమార బాలులకు:—

౧ ఒక పావుసేరు నీళ్ళుకాచి దాంట్లోనుంచి ఒకపెద్దగరిటెడు(టేబిల్‌స్పూన్)నీళ్లొకగ్లాసులోపోసేది.

౨ దాంట్లోఅరగరిటెడు (పైనచెప్పిన) ఆహారముకలిపి మందాగ్నిమీద కదిలించుచూ కరిగించేది.

౩ తరువాత పావుసేరు బాగా ఆవుపాలు మరి అతిక్కిననీళ్ళలోనూది ఏకత్రముచేసి పక్వముగా కాచేది.

మూడు మాసములపైనయుండె యీడుగల చంటిబాండ్లనుగురించి:—

౧ నాల్గుగరిటెలనీళ్ళు కాచి దాంట్లోవకగరిటెడాహారముపైనచెప్పినక్రమములోకరిగించేది.

౨ దాంట్లో సుమారు అర్ధ సేరు [పైంట్] పచ్చిఆవుపాలుపోసిపక్వముగా కాచేది.

ఆహార పరిమాణములయందు తల్లులకు తెలిసియుండుట అవశ్యకమేమనగా:—

౧ ఆహారపరిమాణము:— పైనవ్రాయబడినక్రమప్రకారము చొప్పున చేయబడిన ఆహార మొత్తము (ప

తాయులకు పాలుత్రాగించె) బుడ్డి నిండి మూడు అథవా నాలుగు మాసములయీడుగల చంటివాండ్లకు తృప్తిపొందించేటట్టుదాలును. ఆబుడ్డి నోటికిచ్చి చీకించితే కడుపునిండా చీకి బుడ్డివిడిచిపెట్టెదరు. అప్పట్లో యింకా చీకమని బలత్కారము చేయక మిగిలిన ఆహారము రెండోపూటకు ఉంచి వినియోగానికి రాదు, కాబట్టి పారవెయ్యవలెను. ఖాళీగానుండే పాలబుడ్డిచంటివాండ్లనోటికి యెప్పటికిని యివ్వరాదు యెందుకంటె దానిద్వారా గాలి లోపలికి గూడి కడుపులోకి వెళ్లి బిడ్డకాయలప్రకృతికి మిక్కిలి విరోధము చేయును.

౨ వినియోగమయ్యే పాలగురించి:—ఆహారములో కలిపే పాలను మితముకంటె యెక్కువ వేడి చేయకూడదు. మిక్కిలి కాచితే అజీర్ణాంశమును చెందును గనక జాగ్రతపడి దుర్గాంశములను చెందనివ్వక సరిపెచ్చనగా నుండవలెను. వ్యాసంకాలములో పాలభాండవు శీతలమైన స్థలమందు యుంచవలెను యీలాటి చోటులేక పోతే వక చిటికెడు క్షారద్రావకము (కైకారబానేటుసోడా) పచ్చిపాలలో కలిపి నీళ్లుంచిన పెద్దబాగిణి అథవా పెదబ్బుగల భాండములో పాలభాండమను వుంచేది. వాకవేళ పాలు చిక్కగానుంటె లేక చంటివాండ్లయందు అజీర్ణరోగలక్షణము కనపడియుంటే పాలపై పేరిన మీగడ భాగంతీసివెయ్యవలెను చంటివాండ్లు సహజముగా ఆహారము చీకుతు బాగలేకట్టు కనపించి వాంతిచేసేరు మరి ఆవాంతినుంచి పులుపుకంపెత్తును, అప్పుడు చిటికెడు క్షారద్రావకము ప్రతిపాలబుడ్డిలో కలిసి తాగేది ఆవుపాలు సాధారణముగా దొరికేయెడల యేవొక సంగ్రహముయినపాలను వినియోగము చేయగూడదు. ఆవుపాలు దొరకక సంగ్రహముయినపాలు అనివార్యమయినప్పుడు తీపి కలపక ఘనీభవించిన పాలునుపయోగించవలెను.

౩ ఆహారసమధాతువై:— వేడి లేక బాగా చల్లారిన ఆహారమును శిశువులు తాగరు తాగినా లాభకరముండదు గనుక యివ్వగూడదు యిందుకై తల్లులయినవారు జాగ్రతపడి ఆహారము వేడిగానుండి నోటికి సంతోషకరమైయున్నప్పుడు తాగించితే సమధాతువుండును. వాకవేళ అలసటచేత తాత్పారమై ఆహారము వేడి లేక చల్లారినప్పుడు తిరిగిదాన్ని పాలుచీకేబుడ్డిలో లేక వేరే తగిన భాండములో పోసి వేడిగానుండె నీళ్ళలో కొన్నినిముషాలు (మినట్లు) వుంచి వెచ్చనైనప్పుడు తాగించవలెను. రాత్రిసమయమందు శిశువులకు తాగించడము అగత్యమైయుంటె కావలసినంత కొత్తగాసిద్ధపరచి వినియోగించవలెను కాని నిప్పుకుమీద నుంచగూడదు.

౪ పాలు తాపేబుడ్డి వగైరా అత్యములో స్వచ్ఛముగా నుంచడమనగా:— ఆహారము తాగించిన వెమ్మట బుడ్డి మరి తొటలు (బుగ్గలు) స్వచ్ఛముగాను కడిగి తిరిగి వినియోగానికి తీసుకునేవరకు నీటిలో ముంచివుంచవలెను. ఇందుకుగాను వకజోడుబుడ్లనువుంచితే వకటిమార్చివకటిని వినియోగము చేయుకూడును.

౫ శిశువులందరు వకమాదిరిగా నుండక కొందరు సంపూర్తిదేహములో బలిష్టులుఆరోగ్యులై యుండి పెద్దలవలె తిండి పెట్టించి కోరుతుందురు. కొందరు దార్ఢ్యము తప్పి రోగిష్టిశక్తులైయుందురు. అట్టియెడల ఆహారమును మార్పుతగ్గచేయవలసియుండును. యిందుకుగాను ఆహారపరిమాణములు ఏకాకృతిగా మరి స్థిరముగా నియమించడమువల్లకాదు. కాబట్టి తల్లులే తెలివిగలవారై తమవివేకములో ఆహారమును కలిపి వినియోగముచేయవలెను. తొలుత వాకపక్షము మూడువారములవరకు అనేకమార్లుతాగించిన్ని మితముగానుంచి పైన చెప్పిన యీడుగల శిశువులకు ప్రతిపూటకు రెండుఘంటలవ్యవధిచూచుకొని ఆరు అథవా యెనిమిది గరిటెల (టేబల్ స్పూన్) ఆహారము తాపించితే చాలును. కాని శిశువులు పెరిగేకొద్ది క్రమముగా యీ ఆహారమును పెంచుతుండవలెను శిశువులు సమాధానముగాక అశనాతురులైయుంటె కొంచముమాత్ర పరిమాణమును హెచ్చించి [illegible] తక్కువ నీళ్ళుకలిపిన పాలు పోస్తుండేది. ఆహారము మిక్కిలి చిక్కగానుంటె దాంట్లోనే తిరిగి ఆ ఆహారమును కరిగించి కొంతనీళ్ళు పొయ్యవలెను. ఈలాగున ప్రతిపూట యీ ఆహారమును జాగ్రతతో కనిపెట్టితే ప్రత్యేక శిశువునకు కావలసి యుండె పాలునీళ్ల అంగభాగములను త్వరితములోనే నిర్ణయించవచ్చును.

౬ వకపూట మితములేక ఆహారము చాలా తాపించినందున సరియైన వేళలు విడిచి అనేకమార్లు తాపించినందున అథవా పాలు తాపించే బుడ్డి వగైరా సామాను స్వచ్ఛముగా లేయుంచని హేతువచేతను, పాలలోపమువలన లేక ఆహారము సిద్ధపరచి తాపించే విధులయందు పొరపాటై శిశువులకు ఆహారమువొంటక పోవడము కాబోలని తల్లులకు తెలిసి యుండవలెను. ఆహారము సిద్ధపరచడమునకు మరి పాలుతాపించె బుడ్డి వగైరా స్వచ్ఛము చేయడానకుగాను యింటి నౌకర్లను నమ్మియుండే వాడుక మిక్కిలి అహితకరమైనది. మరి యిందుకనేక శిశువులు [illegible] మిక్కిలి బాధలపొందె హేతువ కనిపించును.

ఆరంభములో కొన్నిపూటలు ఆహారము తాపించగా శిశువులు భేదులు చేస్తురు. అప్పుడు తెలివితప్పి అతిసారమనుకొని భీతోత్పన్నము చేసుకోగూడదు. యెందుకంటె శిశువులు పలాచగా యేరిగేదికద్దు మరి రెండు మూడు దినములో అభ్యాసమై తనకు తానే కట్టుకొనగలదు.

కొన్నిసమయములలో శిశువులకు తగని ఆహారము వడిపించినందున జీర్ణము కాక తద్దోషాంశము పేగులలో తట్టుకొని యేరిగేటప్పుడు అసహ్యకరమైన మరిది వాసన యేర్పడుండును. ఈలాగుండినప్పుడు జాగ్రతపడి పాలపై పేరుకున్నదిక్కనిమీగడభాగము తీసివేసి ఆహారములో కలపవలెను.

ఆహారము చిక్కగానుంటె తాపించితే పుష్టికరమని యనుకునే భావము భ్రాంతిగా పొరబాటైనది. [illegible] తల్లులపాలు పలాచగానున్నప్పటికి శిశువులకు చిక్కని ఆహారమైయుండును చన్నుపాలు చిక్కగానుంటె తాగనేరక అన్నాధారము కానేరదు. పెల్లి ఆహారమందు ముఖ్యమైన లాభమేమంటె పాలలో కలిపితే పుష్టికరముయిన క్ర

వము గానుండి చంటిపాలవలె పలుచగానుండును.

౪ అశక్తులకు మరి పెంపుతల్లులకు గానువుత్తరవు:—

౧ వకగరిటెకంటె యెక్కువ కొలతకుండిన యాహారము వకగరిటెడువెన్నీళ్ళలో కరిగించేది.

౨ తర్వాతచాలినట్లు పచ్చిఆవుపాలుపోసి వకగిన్నె (కప్) నిండా ప్రతిదినములో కావలసినప్పుడే గా మరి అనేకమార్లు తాగుతుండేది. పచ్చిపాలుతాగేదానికంటె మెల్లిన్ఆహారము కలిపితాగితే కొట్టించిపాలుపావకమయ్యేది నిజము. కాని యీలాగున తాగుతుండగా వకసమయమందు వాంతిపడకనుండును. యిప్పుడు పాలలో వేర యాహారములోనీళ్లుపోసి కరిగించితాగవలెను.

పెంపుతల్లులు ముఖ్యముగాఅన్నము తినజాలక యున్నప్పుడు మెల్లిన్ యాహారమును దైవానుగ్రహముగా స్వీకరించి సంపూర్తిగా తాగితే వారిగుబ్బలయందు యథేష్టమైన పాలుపుట్టి పుష్టికరమైయుండును.

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యోగ్యతాపత్రములు.

డాక్టర్ ఉస్టేస. స్మిత ఫిసిషన్ టు హి మె ది కింగ ఆఫ్ బెల్జియన్ వారివల్లయివ్వబడిన

౯ హార్లేస్ట్రీట్, హనోవారస్క్వేర్ ౧౭ మె ౧౮౯౦

ఏదైననాకు పరిచయమున్నవాటికంటెను మీరుసిద్ధపరచిన శిశువుల యాహారము మిక్కిలి ఉచితమయినది. ఆరోగ్యులు అథవా రోగిష్టికుర్రలుండినా సమానహితము చేయతగినది. మరి చంటికుర్రలు దానివలన దాగారక్షింపబడుదురనిసమ్మతించగలందులకు కనపరచినది. ఈలాటి (శిశువులనురక్షించగల) నియమములు పిడేర్చి యాహారవిషయమందు యెంతసిఫారసుపలికినా న్యూనమైయుండును. గాన గ్రాహక విక్రయాదులు యీవరకుమిక్కిలిగొప్పగా జరించుండునని నమ్మితాను.

ఖుద్దుసహీ ఉస్టైస, స్మిత.

జాన్సటానర ఎం. డి. అబ్స్టెట్రిక ఫిసిషన్ టు ది ఫారింగటన్ జనరల్ డిస్పెన్సరివగైరా గొప్ప వైద్యశమలు గలవారినుంచి యివ్వబడిన.

అల్‌బ్రైడహౌస ౧౧౫ సెవింగడన్ కాసల్ ఎస. ఈ ౧౮ జనవరి ౧౮౯౦

శిశువులగురించి ఇతరులు చేసిన యాహారములోను మీరుసిద్ధపరచినదాన్ని సరిపెట్టి న్యాయముగా పరీక్ష చేస్తిగాను మరిదీనివలె శిశువులయందు శీఘ్రముగా ఆరోగ్యకరమయిన యేర్పాటును పుట్టించే పౌష్టిక ద్రవ్యముగల యాహారము కింకోటి లేదని పూర్ణవిచారములో నిశ్చయించినాను. కాబట్టి అన్యవిధి యాహారమునకు యిది విశేషమయినదని నేనెల్లప్పటికి సిఫారసుచేసెదను.

ఖుద్దుసహీ - జాన్సటానర.

మిస్టర్ బర్కులి, హిల్. ఎం.డి. ఎస. ఆర సి. ఎస. ప్రొఫెసర ఆఫ్
క్లినికల్ సర్జరి యూనివర్సిటికాలేజి హాస్పిటాల్.
సరజియన్ టు యూనివర్సిటి కాలేజిహాస్పిటాల్.
౫౫ వింపోల్‌స్ట్రీటు ౧౭ డిసంబర్ ౧౮౯౦

అస్వాభిధీఆహారము. వివరణలో యివ్వబడి పచనము చేసుకునే శక్తిలేక యుండెడి (పసి) బిడ్డలకు అనేకసార్లు నకు తిండిన(యాహార)సారమును చెల్లించి ప్రాణమునురక్షించే సామర్థ్యవరైరిని మీరు దించిన ద్రావకములోను సిద్ధపరచిన యాహారము ఓర్పులేనివారికి సహించలేదనే దృష్టాంతము నేనెక్కడ కానలేదు మరి శిశువులను యెప్పటికినిపోషించె మరి పచనకుయ్యే యాహారమాత్రమని విశదపరచబడినది.

మీరు యేర్పరచిన శిశువుల యాహారము బహుశా జనమాధికి మరి వైద్యశాలకి(సమ్మతమయినదని) తెలిసి యేదు అవాలసమ్మతముగాను విశాలగ్రాహకమును పొందగలందులకై యత్నపడుదునవినాకుతోస్తున్నది.

ఖుద్దుసహీ బర్కులిహిల్ ఎఫ్ ఆర్ సీ ఎస

అసల్ ప్రతి.

ఉదయపురం ౧౨ ఫిబరవరి ౧౮౯౨ మెసర్సు కెంప అండ్‌కంపని యేజంట్సుయిన్ యిండియా వారికి:—

అయ్యా పూర్వం మీరు పంపించిన మూడిరియు కెండుడబ్ మెల్లిన్ యాహారము(బుడ్లు)ను దయచేసి పంపించేరా కెంపన్ కంపని ఆమదాబాదుయని పయిలాసము వ్రాసేది.

ఈయాహారము ఘనముగా గౌరవమయినదేకాక నాబిడ్డప్రాణమును రక్షించినదని నేను సత్యముగా పలుకుతున్నాను. గతించిన నెలలో సుమారు మూడు వారములు (సదరు) యాహారము నావద్ద లేకుండినపుడు నాబిడ్డపూర్వవత్తు బలక్షయములతో అవస్థపడినది పునహ యాహారము దొరికి కొందుదినములు సేవించినంతలో అది యెప్పటివలె గాయెను.

ప్రస్తుతము ౧ ౯౬ సంవత్సరములు ప్రాయముగలవాడును మిక్కిలి భాయములేనివాడ్పు లేయుండువాడును మరి నేను యింకు నడిపించేక్రితం పదిహేనుదినములు కడుపులోవార్తిగా అన్నధారము లేక యుండిన వానికియిస్తున్నాను నేనిద్ది సూచించి మొదలుపెట్టినప్పటినుంచి వానియందు అజీర్ణలక్షణములు కనపించవలయు లేదు. మరియిది ముఖ్యమైన రోగహారియని నమ్మినాను. యీమనిషి జైవతుకీర్తిదయినందున మాంసము వేసి కాచినవారు (మొదలయినవి) కాచించదమువల్ల కాదు. కాబట్టి యీలాటి ప్రసంగములకు అత్యంతోపయుక్తముగానుండెడి యీయాహారము నాయొక్క శస్త్రశాలయందు సంయోగించి యుండతగినది.

ఈఅద్భుతమైన యీయాహారము హిందూస్థానములో పూర్తిగా తెలిసియుండలేదనే నమ్మకముతోను నేనువ్రాసిన మాటలను మీకిష్టమయినట్లు మీరుఉపయోగము చేయగలరు. నేను మీకువిశ్వాసకుడను

ఖుద్దుసహీ ఆర్ డబ్ల్యూ కనింగహాం ఎం.డి సర్జియన్

మీయొక్క బాలాహారము నాస్వంతపిల్లకాయలకై ఉపయోగము చేసి మరి నానమ్మకప్రకారము కాగించి వారియందు దానిగుణమును కనిపెట్టి పరీక్షించగా అది తల్లిపాలు దొరకనప్పుడు ఉచితమయిన ప్రత్యామ్నాయమని మరికేతర కల్పిత యీయాహారములకంటె శ్రేష్టమయినదని మీకు తెలియచేయగల గొప్పసంతోషమును పొందినాను.

జాగ్రతతో(యీయాహారము) చెల్లించినప్పుడెల్లా సరిపడి త్వరగా దార్ఢ్యము మరియారోగ్య సంబంధమయిన బలమును పొందించగల కారణమనుసవహించినది.

వేడినీళ్ళలో (వేస్తే) పూర్తిగా కరిగిపోయి శిశువుల యీయాహారము ఆలస్యములేక సులభములో సిద్ధమయ్యేదే గాక దానిగలశితనము సాధారణముగా జీర్ణకరమయిన చక్కెరతీపునకు రూపాంతమై శిశువులనుఉపశాంతిచేయగల శక్తిని కనపరచుతుంది.

చేతులమీద పెంచబడే శిశువులందరి ఉపయోగముకయి దీన్ని బలముగా సిఫారసు చేస్తున్నాను, మరి నేనుసత్యముగా నమ్మేదేమంటె స్థిరముగా తనయోగ్యతవలన మనోహారమయియుండె యీయాహారము యేదికలదో యది తుదకు విశాలముగా పెంపు కాగలదు.యిదిన్ని నాలాగున నేఅగ్రమయినదని తలంచినాను.

ఖుద్దుసహీ, సి, హిల్లియార్డ, ఎం.డి.

ఇండియాలోవుండే ఏజెంట్లపేర్లు.

కెంప ఎండ కంపని లిమిటెడ, ట్రీచర్ ఏండకంపని, బోల్టన్ ఎండకంపని, హాజియస్మాయల్ ఫజల్ యేసూఫ సికందర్బాద్ పరఫరీ మీటుల్లా. వి.శిరిప ఎండకంపని, జితమూయారీస్ ఏండకంపని, డిగాలియా ఎండకంపని, ఎ.వి. రతం ముర్జీన్ గులామల్లితాన్ జిఎండకంపని, వాల్టరసట్టర ఎండకంపని, హీరజీమూర్ జిఎండకంపని, జాసబళ్ళనవాన్ టి.ఎన్.దేరావాలాఏండకంపని, బాంబాయిపాతగేటుఏండకంపని, కలకత్తా జె.ఎల్. లాయల్ అలాహాబాద. ఈ. స్పీచల్. కరాచి, జె.ఎమ్. టలాండఏండకంపని. కొలంబో. సిలోన్, జె, ఎ, స.యెల్ హోరఏండకంపెని.కలకత్తాఏండ.

బాంబాయి

ఇంగలాండులో ప్రతిబుడ్డీకి ధర ౧ షిలింగ్ ౬ పెంసలు,మరి ౨ షి ౬ పే, మూలేక్ ఆరోవర్క్స్. స్టాఫోర్డుట్రీటు. పెక్కహాం లండన్ ఎస్.యీ.,లోవుండే జె, మెల్లిన్ పేరుగల యీయాహారము చేసేవాడు.

పయిన చెప్పబడిన ఆహారము శిద్ధపరచినట్టుగానే వేరే లాగ్లెగ్యాజేసుకుగలది. మెల్లిన్ వలననే పాలతో చేసినదై ప్రతిబుడ్డీవక్కంటికి ౨ షి 3 పే, వెలకు అమ్మబడుతున్నది.

MASTER BRADLY.
(Aged 18 months.)

"259, Dalston Lane, Mare Street,
"Hackney,
"*January* 13th, 1891.

"Dear Sir, I am proud to hand you a photo of one of my children. This boy was 18 months when this photo was taken and weighed 33 lb. He is very solid and muscular, and not flabby like most big children. Has been brought up on Mellin's Food, and has always been the picture of health.

"Yours truly,
"W. E. Bradly."

هندوستان میں گماشتے — کمپ اینڈ کمپنی لمیٹڈ — ٹریچر اینڈ کمپنی — بولٹن اینڈ کمپنی — حاجی اسماعیل فاضل — یوسف علی شمس الدین — شرف علی هیبت الله — ڈی فلپس اینڈ کمپنی — هیربیما ولازین اینڈ کمپنی — ڈی چھوٹیا اینڈ کمپنی — اے بی شمس الدین — غلام علی تھولجی اینڈ کمپنی — والٹونٹر اینڈ کمپنی — ڈیرحی مولجی اینڈ کمپنی — یوسف عثمان — بی این کررسوالا اینڈ کمپنی بمبئی — بیاتھر گیٹ اینڈ کمپنی کلکته — جے ایل لائیل اله آباد — ای ایچ چلی کراچی سندھ — جے مینٹلیانڈ اینڈ کمپنی کولمبو سیلان — جے ایس ابهاور اینڈ کمپنی کلکته اور مسلی

شلنگ پینس شلنگ پینس
قیمت انگلینڈ میں فی بوتل ۱ ٦ اور ۲ ٦
خاص بنانیوالا
جی میلن مارلبورو ورکس اسٹافورڈ اسٹریٹ پیکہام لندن ایس ای

میلن کے لیاکٹوگلیکوس یا دودھ کی خوراک ایک بوتل کو ۲ اور ۳ شلنگ
میلن کی بنائی ہوئی خوراک کے بنانے میں گائے کا خالص تازه دودھ ملایا ہے

MISS BARBER. (Aged 15 months.)

"96, BRIXTON HILL,
"LONDON,
"4th *March.*

Mrs. E. BARBER writes: —"I beg to forward photo of my little girl brought up entirely on your 'Mellin's Food.'"

۵۵ — وسپول اسکوٹیه تاریخ ۱۷ دسمبر ۱۸۷۰ ع

چندبار اتفاق افتاد که اطفال ضعیف‌الهضم را خوراک ساختهٔ شما داده حفاظت جان ایشان نمودم دگاهی چنان اتفاق نشده که عرق موجه شما گرفته خوراکی ساختم و مریض موافق نیافتاده باشد و این تجربه به ثبوت رسیده که خوراک مذکور جهت اطفال مقوی و منهضم است

و میدانم که خوراک مصنوعهٔ شما نزد طبیبان و عوام‌الناس شهرت خواهد یافت و کثرت خرج و خریداران خواهد شد

برکلی هل ایف آر ایس

مسترس کیمپ و کمپنی گماشتهٔ هندوستان

اودیپور ۱۲ فیبروری سنه ۱۸۷۲ ع

صاحبان من — مهربانی فرموده ازهمان قسم که سابق خوراک میان برای من فرستاده بودند دیگر بیز دو درجن بوتل ازهمان قسم بنام من ارسال دارند بوسربانه ولسن و کمپنی احمدآباد بنویسند

توصیف خوراک مطلوبه خارج ازحد نبایست چراکه یقین میدارم که از همین خوراک جان بچهٔ من محفوظ ماند چنانچه درماه گذشته تا سه هفته ازین خوراک نزد ما بالکل نبود ازین سبب بدستور سابق بچهٔ مرا سوء هضمی لاحق گردید چون باز ازین خوراک شروع کردم در عرصهٔ دو روز باز بحالت طبعی رسیده تندرست شد — الحال هم ازین خوراک مریضی را که عمر ۵۶ ساله میدارد میدهم و مریض مذکور نهایت بیمار بود و برای معالجه مراطلبید قبل ازان تا مدت پانزده روز قسمی ازاقسام خوراک اورا هضم نمیشد ازان روز که ازین خوراک شروع کنانیدم شکایت سوء هضمی نشده و مرا اعتماد کامل است که ازهمین خوراک اورا صحت کامل خواهد شد — چون مریض مذکور ازقوم جین است لهذا شوربائی گوشت نمیتواند خورد پس در چنین حالت خوراک موجوده شما هرچه قیمتی هست برای علاج خانه من

شهرت این خوراک عجیبه درین روز یا در ضلع هندوستان چنانکه باید نشده است لهذا کیفیتی که تحریر کرده‌ام استعمال آن بموجب رای خود میتوانید کرد

من محب صادق شما

صحیح آر ڈبلیو کنڈنگ ہام ایم – ڈی – سرجن

کوانرہام والی سوری – اپریل ۲۴ سنه ۱۸۷۸ ع

خوراک شما باطفال خود خورانیدم و مصلحت خورانیدن اطفال دیگر اعزه و مریضان که نموده بودم برنائیرآن ازنظر باریک بینی در خیال خود آورده بکمال خوشنودی نوید میرسانم که اطفال را وقتیکه شیرمادر میسر نگردد خوراک مصنوعی شما عمده‌ترین خوراکی است که نعم‌البدل شیرمادر می‌تواند شد و من تحقیق می‌دانم که از تمام خوراکان مصنوعی دیگران بهتر است — بشرطیکه از احتیاط داده شود البته موافق طبایع می افتد و فوراً فربهی و توانائی می بخشد

خوراک هذا در آب گرم بالکل مخلوط می گردد چنانکه کارنیاری خوراک باسانی انجام می یابد علاوه برین از آردی که خوراک مذکور ساخته شده است "استذارچ" یعنی اجزادار اشیاء دیرهضم را به صورت شکر متبدل ساخته است تاماده دیرهضم و مصرفوبی بدنی را اطفال باسانی هضم می توانند کرد

علی‌الخصوص اطفال بے مادر و محتاج شیرمادر را بتاکید بلیغ حکم استعمال خوراک شما می دهم و مرا یقین کامل است که از خوراکیکه نفع بلامضرت بتدریج ظاهرشود خرچ آن روز بروز افزونتر خواهد شد و اغلب هست که مطابق رای من بظهور رسد

گماشتهای هندوستان — کیمپ اینڈ کمپنی ایمیٹڈ — ترنچر اینڈ کمپنی — بولٹن اینڈ کمپنی — حاجی اسماعیل فاضل — یوسف علی شمس‌الدین — شرف علی هیبت‌الله — بی ملبس اینڈ کمپنی — جیربیماولاڈبن اینڈ کمپنی — ڈی چھوٹیا اینڈ کمپنی — اے بی شمس‌الدین — غلام علی نیرلجی اینڈ کمپنی — والنرنڈو اینڈ کمپنی — میرجی مولجی اینڈ کمپنی — جوسف عثمان — بی این کریوالا اینڈ کمپنی ممبئی — بیانہہ گیٹ اینڈ کمپنی کلکته — جے ایل لائل الہ آباد — ای اسپنچای کراچی سندھ — جے میٹ لیانذ اینڈ کمپنی کولمبو سیلان — جے ایس ایملور اینڈ کمپنی کلکته و دهلی

[illegible]
[illegible]

[illegible]

۳— باید دانست که اکثر بیماری اطفال و کم رغبتی اطفال از غذای معمولی به سبب سوء تدبیری دایه در پخت و پز و نقص شیر و نا صفائی بچه شیشهٔ شیرخوری و کمی و زیادتی مقدار خوراک و غفلت در اوقات غذای لازمه است خصوصاً در آنجا که کار تیاری غذائی اطفال موقوف بدست نوکران بی پروا باشد

اولاً چند روز از دادن خوراک میلن برای اطفال نرم و ملین میگردد و نیز برای ملین جهت اطفال معبر دلیل صحت و تندرستی ایشانست پس باید که از تلیّن برای ایشان و هم اسهال نه دارند که بعد از موافقت طبیعت ایشان بدستور معمولی خواهد شد

و اکثر جاها دیده شده که بعد از خورانیدن خوراک میلن برای طفل سختی میگراید و بد بو می گردد سبب آن سوء تدبیری و نامناسبت غذا هست که غذای غیر منهضم در امعا محتبس شده متعفن می گردد و قوت دافعه از راه براز دفع می سازد پس علاج آن از سرشیر دهیت دور کرده آب از مقدار معمولی زیاده کرده در قوام رقیق و تنک ساختن است

چون خیال اکثر مردمان اینست که خوراک غلیظ القوام مقوی میباشد غلط است چراکه شیر مادر بغایت رقیق القوام و سریع الهضم است و غذای غلیظ القوام دیر هضم است و قوت هم نمی بخشد و خوراک میلن خاصیتی دارد که بعد از حل و گداز شدن در شیر گاو یا در آب نهایت رقیق القوام و لطیف مثال شیر مادر می گردد

۴— هدایت جهت نحیفان و مادران شیرده—

۱— یک چمچه بزرگ یا زیاده از آن خوراک میلن گرفته در یک چمچه بزرگ آب گرم مخلوط ساختن

۲— بعده یک پیاله ملبب شیر گاو در آن آمیختن— اینقدر خوراک یا زیاده از این حسب خواهش و هضم در روزی چند بار توان داد و نیز با خوراک میلن شیر زود تر هضم کامل می یابد نسبت تنها خوردن و اگر به طبیعتی بموجب هدایت مذکوره ناموافق افتد پس باید که خوراک میلن در لسی زیاده آب یا به آب خالص بدرجه کمال پخته و گداز کرده بخورند

جهت زنان شیرده خوراک میلن عمده ترین خوراک است برای افزودن شیر چنانکه بالا مذکور شد

سفارشنامجات

از طرف ایوسنس اسمتهه— مشهور ڈاکٹر شاه بچگان

۵— جارج اسٹریت هانوور اسکوبر— تاریخ ۱۷ می ۱۸۷۰ ع

خوراکیکه شما برای اطفال ساختهٔ آن از تمام خوراکان که از آنها واقف ام بدرجه کمال افضل است و این خوراک مناسب طبایع اطفال و مریضان است علی الخصوص جهت اطفال صغیره خواه تندرست باشند خواه مریض زود هضم است و ثقالت ندارد و در خوراکی که این همه صفات موجود باشد مستغنی الاوصاف است و مرا یقین کامل است که درین روز ها خواهش و خرچ این زیاده است

ایوسنس اسمتهه— ایم— ڈی

فرنگلن جنرل و حکیم حیوانی شفاخانهٔ دایه گری و ماضی طبیب شفاخانه شاهی جنوبی لندن و ڈپوٹی میڈیکل آفسر قید خانهٔ پارس مانگرلین— از طرف جان تیانر— ایم— دی

الفریڈ پوس ۱۱۸ نیونگٹن کازوی سوتهه ایسٹ— ۱۶ جانیوری ۱۸۶۹ ع

از خوراکهائیکه مردمان دیگر برای اطفال ساخته اند خوراک مصنوعی شما را مقابله کرده شد تشفی کامل شد که خوراک شما در ابدان اطفال زود تر طاقت و توانائی پیدا کند چنین خواص و تاثیرات توانائی بخش در خوراک موجوده شما هست که در خوراکهائی دیگران نیست لهذا من همیشه بر خوراکهائی دیگران ترجیح میدهم

از طرف جان تیانر— ایم— ڈی

مسٹر برکلی هل ایم ڈی ایف آر سی کلنیکل سرجری و مدرس یونیورسیٹی کالیج هاسپٹل و سرجن یونیورسیٹی کالیج هاسپٹل

۳—آگاهی برای مادران شیرده و خوراک سازان اطفال

—چه قدر خوراک باطفال می توان داد— باید دانست که مقدار خوراک مرقومهٔ هدایت بالا جهت پرکردن یک شیشهٔ شیر خوری بس است و طفلان سه ماهه تا چهار ماهه را برای یک وقت کافی است و اگر آن قدر خوراک در یکدفعه طفل خوردن نتواند و فاضل ماند لازم است که آن پس مانده را بیکار دانند و بار دیگر بکار نیارند چراکه پس مانده را بار دیگر گرم کنند بدمزه و ترش میگردد و قابل غذائیت نمی ماند و نیز باید دانست که غذای مرتب را در شیشهٔ شیر خوری پر کرده طفل را برای مکیدن بدهند تا حسب عادت و خواهش مثل شیر مادر بمکد اگر قبل از تمام شدن غذا طفل بی رغبتی نماید و سیری حاصل گردد شیشهٔ غذا را از طفل دور باید کرد و بجبر نباید خورانید چراکه خوراک زیاده از رغبت صادق اطفال در معدهٔ ایشان فاسد شده تکلیف میرساند و نیز شیشهٔ خالی از غذا را باطفال مکیدن ندهند که هوای خارجی بوساطت آن در معدهٔ اطفال حلول کرده اذیت میرساند

۴—طریقهٔ استعمال شیر — این امر ضروریست که شیر برای مهیا کردن خوراک اطفال است آنرا زیاده از یک دو جوش بر آتش نگذارند که از زیادتی جوش غلیظ و ثقیل می گردد—وقتیکه اطفال جهت خوردن خوراک بی رغبتی نمایند این دلیل سیر شدن ایشانست و در موسم گرما بجای سرد نهند یا در شیر تازه "بای کاربونت آف پوتاش" بقدریکه در سبابه و ابهام گنجایش کند انداخته چند ثانیه حرکت داده در شیشهٔ شیر خوری انداخته در ظرف آب سرد غرق دارند و اگر شیر غلیظ و ثقیل شده باشد و طفل هضم نتوانکرد در آن وقت دهبت شیر از سر شیر دور کرده بخورانند و بعض اوقات طفلان باوجود خوردن غذای معمولی نیز بیمار می شوند پس اگر در قی ایشان بوی ترش محسوس شود آنوقت درمیان هر خوراک بمقداریکه گفته شد "بای کاربونت آف پوتاش" شامل کرده باید داد تا غذا هضم کامل یافته ثقالت نیارد و چون شیر گاو تازه بهم رسد شیر منجمد که از ولایت می آرند استعمال نباید کرد اگر ضرورتاً بسبب نایابی شیر تازه حاجت افتد آنوقت بهریکه بی شکر تیار کرده باشند استعمال توان نمود چراکه زیادتی شکر طفلانرا مضرت میرساند

خوراک اطفال را چه قدر گرم باید داد— خوراک خیلی سرد باطفال نباید داد زیراکه مفسد طبع نازک نیست و نامفید مزاج ایشان است پس میباید که قبل از خورانیدن طفل مادر یا دایه قدری از آن در چشد بعد از آن بطفل بخوراند و اگر به سبب تأخیر سرد بشود شیشهٔ شیر خوری را در آب گرم چند دقیقه گذاشته گرم کند تا بدرجهٔ اعتدال رسد و اگر بوقت شب غذا دادن ضرورت افتد آنوقت هر قدر که ضرورت باشد همان قدر درست کند و قبل از خورانیدن بدرجهٔ اعتدال گرم کرده باشد

۴— ثانی شیشهٔ شیر خوری را صاف دارند — هر وقت بعد از استعمال بروش انداخته صاف شسته باشند تا وقت حاجت دیگر در آب سرد باید گذاشت و اگر دو شیشه مهیا داشته باشند بهتر است تاکه نوبت به نوبت استعمال کرده شود

۵—بموجب خواص خلقی اطفال بیش و کم خوراک باید داد— بعضی اطفال تندرست توانا و قوی الجسم میباشند و بعضی مریض و ناتوان و کم قوت لهذا همه اطفال را بیک مقدار خوراک بس کردن غیر ممکن است — بعضی اطفال صحیح المزاج را نسبت ضعیف مزاجان خوراک مضاعف درکار است لاجرم مادران و دایه های شیرده را لازم است که برسائی عقل و دانائی خود بموجب کفایت اشتهای اطفال غذا مهیا دارند و بخورانند چنانکه اولاً یک دو هفته خوراک بمقدار اوسط اشتها بدفعات داده بیازمایند و نیز برای اطفال عمر مذکور بقدر شش یا هشت چمچهٔ بزرگ بعد از دو دو ساعت کافی خواهد بود و چون بزرگ شود بتدریج حسب عمر و اشتها در خوراک باید افزود چون آنقدر خوراک برای وقتی بچه را کفایت نکند و گرسنه ماند آنگاه قدری از خوراک معمولی گرفته در آب یا شیر بقدر کفایت حل ساخته بدستور مذکور بخورانند تا که طفل سیر و آسوده گردد و اگر خوراک معمولی طفل را ثقالت آرد آنوقت بموجب هدایت بالا خوراک معمولی کم کرده آب باید افزود تا رقیق و لطیف گردد و نیز بسیار باید دقت تا گذار کامل باشد — خوراک و آب و شیر طفل را چه قدر دادن این همه از باریک بینی و تجربه کاری دریافت می توان شد

خوراک تیار کردهٔ میلن برای طفلان شیرخوار و مریضان اضعف‌القوی را بجهة اعتبار عمدگی میدارد

۱—خوراک مصنوعی داکتر میلن اگر در شیر گاو رقیق امتزاج دهند بعینه مثل شیر مادر خوراک مکمل میگردد و در آلات غذا زود تر استحالهٔ کامل یافته تقویت و تنمیت می بخشد زیرا که استعداد قوت تغذیه و تنمیه درین غذا فی‌البدیهه موجود است

۲—اجزاي خوراک میلن بموجب قواعد و قوانین طبیه کیفیتی خاص دارند که بمجرد وارد شدن بمعده استحالهٔ کامل یافته و مستحیل بخون شده در عروق و مجاري ضیقه میلان طبیعي مي نمایند و بدل ما یتحلل مي گردد

۳—خوراک میلن بموجب قواعد علم کیمیائي و قوانین درست علم موجودات ترکیب یافته و درست کرده شده است

۴—خوراک میلن از آرد غله ها از 'اسٹارچ' یعني آهار یا نشاسته غله ترکیب نیافته بلکه از جوهر غله ترکیب یافته و تیار کرده شده است

۵—در خوراک میلن شکر نیشکر داخل نیست

۶—خوراک میلن از حبوب غله خام جریش یعني نیمکوفته بطور ناقص‌العلمي و عملي ترکیب پذیر نگردیده

۷—خوراک میلن بموجب قواعد اصول علم و طریقهٔ لیبک بکمال استدراک و هوشیاري از آرد جو و گندم عمده ساخته شده است

۸—خوراک میلن در آب گداز و مستحیل میگردد و نیز درین سبوس و جزء ثقیل اصلا نیست

۹—در خوراک میلن از تصرفات طبیبانه تنقیه و تصفیه جزء لزج یعني آهار دارکرده بدرجهٔ لطافت چنان رسانیده که در ابدان صبیان و اطفال صغیر و ضعفاء اضعف‌القوی ضعیف‌الهضم و انحدار مثل ابدان کامل‌القوي زود تر منحدر شده و هضم کامل یافته جزء بدن میشود و بدل ما یتحلل میگردد

۱۰—خوراک میلن براي تندرستان و مریضان و ضعیف‌القوی و تنیکه باید و چنانکه شاید بموجب هدایات مذکوره درست میتوانکرد

۱۱—در خوراک میلن 'الکالین' یعني خاصیت ملحیت موجود است لهذا در معدهٔ ناتوانان ثقالت و حمضي و سوء هضمي را کم مي کند

۱۲—خوراک میلن در ابدان مردمان ضعیف‌القوی و اطفال صغیر شیر گاو را بکمال هضم میرساند و فاسد شدن نمیدهد

۱۳—خوراک میلن در حالت شیردهي طفلان بدایه خورانیدن شیر دایه مي افزاید و نیز شیر صالح پیدا مي کند

۱۴—خوراک میلن درحالت رضاعت نیز بطفلان می توان داد و بخورانیدن این خوراک طفل بآساني شیر مادر میگذارد

فهمایش طریقه استعمال خوراک میلن

۱—براي طفلان شیرخوار سه ماهه و صبیان نازک مزاج

۱—بمقدار چهارم حصه پینت (نیم شیشه شیرخوري طفلان) آب خالص گرفته ازان یک قاشق کلان آب در ظرف دیگر در آوردن

۲—بقدر نیم چمچه کلان خوراک میلن در آن انداخته بر آتش نرم گذاشته حرکت دهند تا خوراک میلن در آب ممزوج گردد

۳—بعد ازان بمقدار چهارم حصه پینت (یعنی شیشه شیرخوري ملبب شیرگاو) در آب ما بقي شامل کرده بقدر ضرورت گرم کرده بطفل بخورانند

۲—جهت زیاده از سه ماهه اطفال

۱—بمقدار یک چمچه بزرگ خوراک میلن گرفته و چهار چمچه آب خالص در آن انداخته حسب دستور بالا مخلوط کرده بدهند

۲—بعد ازان بمقدار نیم پینت شیر گاو تازه در خوراک مذکور مشمول کرده بقدر ضرورت گرم کرده بدهند

DOUGLAS HERBERT FISH.
(**Aged 6 months.**)

"39, Nightingale Road,
"Clapton, London,
"23rd *February*, 1889.

F. M. Fish writes:—"He has been fed on Mellin's Food entirely, and proves by his strength and size how excellent Mellin's Food is."

PERSIAN.

میلن فوڈ یعنی خوراک مصنوعی ڈاکٹر ملن برای طفلان و ضعیفان ضعیف القوی

حسب الارقام ذیل خوراک مذکور و موصوف در شیر گاو ممزوج و مخلوط نعم البدل شیر مادر میگردد و ضعیفان ضعیف القوی و طفلان شیرخوار را عمده ترین خوراکست که اطبای نامدار تعریف و توصیف آن کرده اند

مصنوعی که در هوای گرم و رطوبت ناک متعفن و متغیر نگردد خاصه همین خوراک یعنی میلن فوڈ است زیرا که خوراک موصوف مرکب یعنی شیرهٔ غلهٔ سه چند و خشک کرده است و در آب زود تحلیل میگردد و نیز دری غذا کرمهای باریک نیستند

ڪيانوهام والي سرري — اپريل ۲۴ سنه ۸۷۸

ٻچڙن مصيحي ٻچن ۽ وري پڻ ننڍي عمر مريضن جي جلدي اوائلي خوراڪ ڪهڻ لاءِ هن سفارش ڪ اها آن مثلي انهيءَ ڇهڙي تاثير ڪئي جي آره سڀ مان سڀ خيالن ۾ وڌ نظر ڪئي ۽ وري اوهين ڪال ڪ نهايت خوش ٿي لکهائيو جي ڪڏهن مان جو خير ميسر نه ٿيلي ته آن وقت اوائلي ٿيلي ٿي خوراڪ مان ج خير جي مونٿي منجهه ميڪري عمده شي آهه ۽ وري اهو جاڻا تو جي مڙني مصنوعي خوراڪن ۾ جهنگي ۽ جڏهن برابر ترڪيبن سان ڏنا جڻي ٿڏي هن هر وقت ڏنو آهه جي طبيعت کي موافقت پئي آهه ۽ وري آن گوشت کي طاقت ۽ توانائي اچي ٿي

هي ڪوهي پاڻي منجهه ٻل ڪل گري وڃي ٿي جن سان ٻچن جي خوراڪ تيار ڪرڻ لاءِ نهه آسان وڙ انجام برابر ٿيلي ٿو علاوه انهي جن اٽي سان جي خوراڪ تيار ڪئي آهه ان منجهه جي "إسٽارچ" (اهاڙ داڻ ماده سولائي سان هضم ٿي سگهي ٿو ان طرح نهه صورت شڪر متبدل ڪئو آهه ۽ وري جن شي کي نهو هضم نٿو ڪر سگهي ۽ وري جن سان آن جي طاقت بدلجي منجهه نقصان ٿيندو آهه ته تيزي شي کي هضم ڪرڻ منجهه کي صحت اچي ٿيندي

۽ وري جن ٻچن کي مٿ ماءُ پاڻ نا بغير مان جي اٿي هي خوراڪ ڏيڻ لاءِ هن ڪهن تاڪيد و مضبوط سفارش ڪريان ٿو وري منکي يقين پورو آهه جي جن خوراڪ جو فائده بتدريج ظاهر ٿائين آن جو ڪنو هي وڏاري ٿيندو وري مصحي ارادي جي مطابق هيڙو ٿو ڪهي

هندوستان منجهه گماشتي — ڪيمپ اينڊ ڪمپني ليمٽڊ — ٽريچر اينڊ ڪمپني — بولٽن اينڊ ڪمپني — سد إسمٰعيل فاضل — يوسف علي شمس الدين — شرف علي هبت الله — بي فليپس اينڊ ڪمپني — جرنيول لاين ڪمپني — ڊي چهونيا اينڊ ڪمپني — اي دي شمس الدين — غلام علي نيوناڇي اينڊ ڪمپني — والٽر اينڊ ڪم — هيرجي مولجي اينڊ ڪمپني — جوسف عثمان — بي اين ڪرريوالا اينڊ ڪمپني منبئي — بيانهر گيٽ ڪمپني ڪلڪته — جي ايل لائيل الهاباد — اي إسپيچلي ڪراچي سنڌ — جي ميڪ لپانڊ اينڊ ڪمپني ڪو سيلان — جي ايس ايملور اينڊ ڪمپني ڪلڪته ۽ وري منبئي

شلنگ پينس شلنگ پينس

قيمت انگلنڊ منجهه ميڪري باٽلي ۱ ۹ وري ۲ ۹

خاص ٺاهڻ وارو

جي ميلن ميلارٻورو ورڪس: إسٽافورڊ إسٽريٽ . پيڪ هام لنڊن ، اس اي

ميلن جي لياڪنر گليڪوس يا جيرو جي خوراڪ ميڪري باٽلي کي ٻه ۽ ٽي شلنگ
ميلن سي بٺاليلي خوراڪ جي ٺاهڻ منجهه ڪار خير خالص تاجو ميلا ٻو آهه

جان ٽيالر — ايم ڊي

مسٽر برڪلي هل — ايم — ايف — آر — سي — ايس — ڪلنيڪل سرجري وري يونيورسيٽي ڪاليج هاسپٽل ۽ ڊس ۽ وري يونيورسيٽي ڪاليج هاسپٽل جي سرجن جي طرفان

۵۵ — ومپول اسٽريٽ — تاريخ ١٧ ڊسمبر ١٨٧٠ ع

ڊيئرا پيرا ان موافق ٿيندو آهي جن ٻارن کي ٻلي ڪ قسم جي خوراڪ هضم نه ٿيندي هجي ان ڪري انهي خوراڪ ڏيڻ سان جان ٿيندي آهي ۽ وري ڪو هيڏو وقت گذرڻ نه ٿيو آهي جو انهي عرق ڪري ٻڪ خوراڪ ٿيندي لاءِ آرو مريض کي موافق نه ٿيندي هي گذرڻ نه ڏٺو ۽ پڻ وري هن ڳالهه جو ڪري ثبوتي ڏنو آهي جو ٻارن جي واسطي هي خوراڪ قوت بخش ۽ هاضم آهي

اوڻ چاڻان تو جي انهي تيار ٿيڻ لاءِ خوراڪ جن وقت حڪيمن وري عام ماڻهن منجهه مشهور ٿي ڏي ٿڏ انکي ان جي وڌاري خرچ وري نڪار جي اميد برابر ٿيندو

برڪلي هل — ايف — آر — سي — ايس

(درست نقل)

مسرس ڪيمپ وري ڪمپني گماشتا هندوستان اوڌيپور ١٢ فيبروري سنه ١٨٧٢ ع

صاحبان من — مهرباني ڪري ٻه ڏجن ٻانليون ميلن جي ٻارن لاءِ ٻٻن جي خوراڪ جي منهنجي نالي ۾ ڏيڻا آهه قسم جي جهڙي ان اڪيا ملائي آهي — منهنجي سرنامو پرولسن وري ڪمپني احمدآباد لکيا

ان خوراڪ جي جيتري تعريف ڪريان اوتري ٿوري آهي ڪ جي منکي پورو يقين آهي جي ان سان منهنجي ٻچي جي جان ٻچي آهي گذريل مهيني منجهه تري هفتن تاءِ جي اسان وٽ ان منجها ڪ خوراڪ ڪل نه هوئي ان سبب اڪيا جي موافق نه هضمي ٿيڻ لڳي تڏهن وري هي خوراڪ اوڻ ان کي ڏيڻي نه ڪري ٻه ڏينهن منجهه وري وڌ هميشه جيترا چنگو ڀلو ٿيڻ آهي

في الحال هي خوراڪ اوڻ هيڪڙي مريض کي جنهنجي عمر ۵۶ ورهيه آهي ڏيان تو هي مريض ڪنهن مارهو وري ٻنهه جو علاج ڪرانده منکي ڪرنابا امين آکيا ان جي پندرو ڏينها لهس ٻلي ڪ قسم جي خوراڪ هضم نه ٿيندي هوئي جن ڏينهن سان اوڻ هي خوراڪ انکي ڏيڻي شروع ڪئي ان ڏينهن سان انکي ڪا اري ٻڌ هضمي جي نه ٿيڻي آهي ۽ وري ڪنو ڪري منکي بهترو سو آهي جي ان سان انکي چنگائي ٿيندي وري به لوڪهو جئين آهي ان لاءِ گوشت جو شوربو کائي سگهي ٿو وري هيڏي حالت منهنجو انهي خوراڪ تيار ڪرڻ لاءِ جهڙي هيڪڙي نهايت ٿيندي هتيار آهي منهنجو ملڪ خانه جي

لاءِ هيڏي ڪهايب خوراڪ جي شهرت اچ ڪال جيڪري هندوستان منجهه ٿيندي ڪمپني اٿيي نه ٿيڻي آهي منهنجي ڪري سان لکيو آهي ان جو استعمال انهي مرض جي موافق ڪري سگهو ٿا

اوڻ اوهانجو صحب صادق اڪيا

ها — ا ق

الڪل پٽرولي ٿو لڳي تندرستي منجهه عمده خوراڪ ٿي ٿي جاڏي شي بالڪل هضم ٿئي ٿهڻي وڃي ٿي ٻالڪ ٿئي ٿي ۽ جي ميلن جي ٿهڻي لي خوراڪ منجهه ميڪرو مي فائدو آ جڏهن ڪري وڃي ٿي ٿئي ٻاهڪ ڦوت منجهه ڪمتي مروڪي ڦلتي ٿهڻتي ۽ پڻ ماجي خبر جهڙي پاتهي تندي آ

٣—ناتوان مارڻن جي مان پنڌ جي ٻجي ٻ خبر پيارين تي ان جي لئي مدابات

٤—ميڪرو وڏو جهڙو منجهو بمريلو ڪي وداري ميلن نرد جهنجي ۽ وري وڏي جهڙي ٻ ڪرسي پاڻي منجهه ان ڪي خوب ملائجي

٢—۽ وري پيالو ميڪرو بڻبي ڪار جو تندو خبر ان منجهه ملائجي اتري خوراڪ ڪي ان ڪنا وداري جيڪري ڪينڌي منجهي ڏين منجهه ڪلي ٻترا حصي ڪري ڪهرالي جي—ميلن جي ٿهڻي لي خوراڪ جي پترو خبر ملاء پلي نمروپلو مقام ٿهڻي تو نسبت چئو پين جي ۽ وري پڻ ان طرح استعمال ڪرڻ مي ناموافق تندي ته ان منجهه وداري پاڻي وٽجي پاڪو ڪري يا فقط پاڻي منجهه ميلن جي خوراڪ ڪي ڪار جي

۽ جي ڪدهن مان پنڌ جي ٻجي خبر پيارندو آ ان لاء هي ميلن جي خوراڪ ميڪري وڏي نعمت تندي خصوصا ان حالت منجهه جي وه پنڌ جي معمولي خوراڪ جيڪري ڪمتي آوتري ڪهاء نه سڪي—ڪافي خوراڪ جي ڪهڻين مي مان جو خبر وداري ٿهڻي تو وري پڻ وداري فائدو بخش آ

هي سفارش نامو

بلجهن جي پاتشاه جي مشهور ڊاڪتر ايوسٽس اسٽمهه جي طرفن مي

٥—جارج اسٽريٽ هانوور اسڪوائر—تاريخ ١٧ مي ١٨٧٠ ع

۽ جيڪ خوراڪ ان ٻچن جي واسطي ڪلي آ وه پين تمام خوراڪن جي جن مي آ واقف اهيان انتها درجن جي هي خوراڪ عمده آ ۽ وري پڻ جي خوراڪ ٻچن خواه تندرستن خواه مريض هون تي جي طبيعت جي واسطي موافق آ ۽ وري جهڙو ڪري ڪهڙو منجهو ٻچن جي واسطي ثقيل پڻ نه آ ۽ جن خوراڪ منجهه هي ڪالري هون انجي وداري تعريف ڪرڻجي ڪي حاجت نه آ ۽ وري اسان ڪي ڪامل يقين آ ۽ وري اج ڪال انجي وداري خواهش ۽ خپه آ

ايوسٽس اسٽمهه—ايم ڊي

فيرنلگٽن جنرل ۽ وري خيراتي شفا خاني جي داءه ڪري جو حڪيم جنوبي لندن جي شاهي شفا خاني جو ماسي طبيب وري مارس مانگريس جي ٻنڌ خاني جو ڊيپوٽي ميڊيڪل آفسر جان ڏيانر—ايم ڊي جي طرف مي

١١٨—الفريڊ هوس نيولنگٽن ڪارڙي سوتهر ايسٽ—١٦ جانيوري ١٨٦٩ ع

جيڪ خوراڪ ٻلن مارولن ٻچن جي واسطي تيار ڪئي آ انجي ديري اوانجي تيار ڪرڻ خوراڪ جو مقابلو هڪو نه اسانجي ٿلي ٿهڻي جي ٻچن جي بدن جي منجهه جلديس طاقت ۽ رندي وڏي توانائي پيدا تيندي ڏيندي جيڪي خواص اوانجي تيار ٿهڻي لي غذا منجهه اهين ٻلن جي خوراڪ منجهه نه آ من ڪري الا وڻ هميشه ٻلڪي ٻلن خوراڪي هر قسم جي خوراڪ ملي تو جي ديا تي

وٺجي ٿو. هن رات جي وقت ٻچن کي کارائڻ منظور هجي ته جيڪي ضرور آهي اُتري لهڻي تيار ڪجي
ڏري کارائڻ جي وقت ٿورڙي ڪوسي ڪجي

٥— کير پيئڻ جي باٽلي وري نپلي کي حفاظت سان صاف رکجي— ۽ هر وقت شيشي کي برش سان
ڌوئي صاف ڪجا ۽ وري ٻڌو پيڙو ڪم منجهه اچي تنهن اُن کي ٿڌي پاڻي منجهه رکجا— ٻه ٽي ٿا رکجا بهتر
آهي ته واري واري استعمال ڪرڻ منجهه اچن

٥— ٻچن جي خلقي خاصيتن جي موافق انهي کي ودائڻي کهڻاري خوراڪ ڏيجا ۽ پڻ— ڪي ڪي ٻچا ڇڪو
وڏو وارو قوت وارو آهين وري ۽ پڻ بعضي روڳي ناتوان وري ڪم قوت جي واسطي هر ڪنهن جو خوراڪ هيڪري
هي قدر جي ڏيڻ لاءِ آهه ٿيڻو آهي ڪڏهن هيکر ٻچا جوانن جي مثال ٻين جي نسبت ودائڻي خوراڪ کپي
اتري لاءِ ماءِ ۽ پڻ دائي کي ضرور آهي جي پنهنجي دانائي ۽ عقل جي رسائي سان خوراڪن کي تيار ڪن
وري پڻ گهرائين اول ٻه ۽ ٽري ڪنفن تهن خوراڪ اوسط درجي جي وري ٻن ٽن ٻه پيرا ڏيجا وري
اتري عمر جي ٻچن کي کير هيڪري ڪلاڪن جي بعد ڇهه ۽ اٺ ڀيرا ڏينهن ۾ ٻهري ڏيڻ لاءِ ڪافي آهي ۽ وري
جڏهن ٻچو وڏو ٿيندو وڃي ته بقدري خوراڪ ودائجي ڪڏهن هيکڙي وقت جي انري خوراڪ کهراءِ ٻاجانا
پهچي جو پيٽ نه ٻهر جي ته پڻ ٿورڙي خوراڪ کپي انهين قدر پاڻي اُن منجهه ملاءِ وري کير پيارجو هجي
ته پاڻي وجهي پيارڻ ڪڏهن ٻچي کي خوراڪ ثقيل ٿي وڃي ته هدايت منجهه ڏکارڻي آهي خوراڪ کي
مقدار سان ٿورڙي آهي ڪنهي ۽ وري کير منجهه ودائڻي وجهه پاڻي گارجي— خوراڪ پاڻي ٻلو کير هجي
انهي واسطي ڪيترو ڪنهي هي ڪالرُيون سڀ ناريک نظر وري ٿورڙي ٿورڙي ٻرڪي سان دريافت ٿيندي

٦— جن وقت خوراڪ ناموافق ٿيندي اُن وقت کير منجهه ٿوري خوراڪ تيار ڪرڻ ٿولي ڏيڻ جي طريق
منجهه ڪيطرح سان ٻهرل ٿيلي آهي ٿوري هيڪري وقت منجهه ودائڻي خوراڪ ڏيڻي آهي ٿوري ٿورڙي ٿورڙي ڏيڻي
آهي هي سڀ نقصان کير پيئڻ جي شيشي کي صاف نه ڪرڻ جو باعث آهي ان امر جي خبرون ماءِ ٿوري دائي
کي پنهنجي ڪشفي رکڻي کهپي— نه فقط جي هي اخري خطائون اڪثر ٻين ٿي ٿيون هي خصوصاً جيت
خوراڪ تيار ڪرڻ جو ڪم بالڪل نوڪرجو هٿ منجهه آهي سمجهه آهي جي ٻچن کي اڪثر بيماريون ان سبب سان
رهڻي آهين

پهرين ٿورڙي وقتن ڏينهن سان دست پڌرا ٿيندا ته هيٺ منجهيا جي ٻچي کي اُن تي آرام ٿوري اُن
سان ڏراصر ڪجا پهرين ٻچن جو دست پڌرو ٿي ٿو ۽ وري هيڪڙو ٻه پيرا ان موافق ٿيندو ۽ وري ٻوءِ اصلي
حالت منجهه ٿيندا ۽ وري پڻ خوراڪ کوهڻ جي پٽيا ٻچي کي دست ڪاٿا ٿيندا ڪڏهن ان منجها نه ٿو آهيندي
ته هي سبب ٿيندو ٿي ته جي جن وقت ٻچي کي نامناسب خوراڪ ڏواءِ جي في جيڪ الڳڙن منجهه ٻهرباري
هجي وري ٻه چهڪ خوراڪ جي ٻيري خارج ٿي وڃي ٿي ڪڏهن هي ڪال هوءِ ته هشيارن سان کير جي مٺا
ملائي لاءِ جي وري خوراڪ منجهه استعمال ڪرڻ ڪنا آڪيا جهڙو پاڻي وجهي ٻلو ڪجي

اڪثر ماءُون جا هي خيال آهين جي جيڏي خوراڪ کپي گهڻي ٿي هي ڪال غلط آهه ماءِ جو جٿي

ملاءِ ڏجي

—۽ وري ٿوري اڌ پينٽ ٿڌي اٽو ڳاڙهو خمير آن منجهه رجي وري مقدار ضرورت لاءِ ڪوشش ڪري

۳—هاڻ اُن جي ٿولاءِ جنهن مطلب ظاهر ٿئي

۱—خوراڪ ڪٿي کپندي—هدايات مذڪور منجهه جيڪي انداز ڏکاريون آهه وه خمير پيٽ جي نالي ٻهرنجهه واسطي بس آهه ۽ وري آٽي خوراڪ نري چار ڪلاڪن جي ٻچن کي هيڪڙي وقت جي کارائڻ لاءِ بس ٿيندي ڪڏهن وه عڙتي خوراڪ تمام هيڪڙي وقت منجهه نه کائي سگهي تہ باقي ماندو جي پيٽ سان پڪائي ڏيڻ ٺهڪي هي سبب آهه پنهنجو ڪوشش ڪرڻ سان کٽي ٿيندي ۽ وري پڻ کهڻ جي قابل نه رهندي آن خوراڪ کي خمير پيٽ جي نالي منجهه ٻهرجي، وري وه خلاص ٿيڻ تمام ٻچي کي چوسڻ ڏجي ۽ پڻ ڪڏهن اڪيلا جي پيٽ منجهه سير ٿيو نه وداري کارائڻ جي تڪليف نه ڏجي—وداري خوراڪ کهڻ سان ٻچو منهن فراغ نه سمجهي ويچي جي مقدار حاجت کائي چڪو—جڏهن نالي جي خوراڪ خلاص ٿي ويجهي تڏهن آن وٽا پوريا ڪجي ٿهاي نالي چوسڻ سان ٻچن کي نقصان ٿيندو آن منجهه هي سبب هوءِ جي ٿهلي نالي چوسڻ سان آن جي پيٽ منجهه وا ٻهرا بو جن سان اُهيڪي بي آرام هوندي

۲—خمير ڪن طرح استعمال ڪجي—هي ڪرڻ ضرور آهه جي خوراڪ تيار ڪرڻ منجهه ميلن جيڪي خمير جو استعمال ٿيو آهه جيترو ڪوشش ڪريجو حد تائين آهه آن کنا ودا ري نه ڪجي وداري ڪوشش ڪرڻ سان ثقيل ٿئي تو هن ڪري هشياري رکڻ آهه جي خمير حد کنا وداري ڪوشش نه ٿي وڃي ۽ وري گرمي جي موسم منجهه آن کي ٿڌو منڌي رکجي ۽ وري تاري خمير منجهه هيڪڙي چپٽي ٻهري بائي ڪاربونيٽ آف پوٽاش وجهي ڪي پل تاءِ ڦهس ٻڌار تو وري پوءِ آن کي خوراڪ ٻهري اپ نالي کي ٿڌو پاڻي ٻهري لوٽائڻ هوءِ آن منجهه مرجي ۽ وري ڪڏهن خمير کاٽو هوءِ ۽ وري ٻچي جي مد هضمي جو اثر ڏسو تہ آن حالت منجهه آن مٿاڻهوري ملائي لاءِ جي هڪڙي ڪڪهه پالڪ پاڌ جي اصلي کهڻ سان رڪي ٿيڻ تا ڪڏهن ٻچي جي الٽي منجهه ڪٽي ٿيندي تہ نالي منجهه بائي ڪاربونيٽ آف پوٽاش هيڪڙي چپٽي ٻهري وجهي ڏجي ۽ وري پڻ جيسين ڳاڙهو خمير ملي سگهي تہ ٽيسن ٻلي قسم جو منجهه خمير استعمال نه ڪجي ڪو وقت منجهه خمير بيمار تو پو تہ جيڪو خمير بعمر کهڻ جي تيار ڪيو آهي آهي استعمال ڪجي کهڻ وداري ٻچن کي نہ ڏجي

۳—خوراڪ ڪٿي ڪوسي کپي—خوراڪ وداري ٿوري ڏيڻي تہ کپي ان سبب جي ٿها پسند تا ڪن وري ان کنا مفيد ٻلي نہ آهه—خوراڪ ڏيڻ کنا اڪيا مان هوءِ باداڻي هوءِ ٿورو بي نهاري جڏهن ڪوسو هوءِ تڏهن منهن کي چنگائي بخش هوءِ تڏهن سمجهي ويچي جيترو ڪوسو کپي آوترو آهه ڪڏهن ڪو سبب سان وار لاءِ ملائکي منجهه خطائي وڃڻ سان ڪرڻ ٿڌو لهرائو آهه تڏهن جڏهن ٽان منجهه يا خمير نالي منجهه هوءِ آن کي ڪوسي پاڻي سان ٻهرو هوءِ وڌي منجهه ڪٽي مٽ رکي ڪوسو ڪجي—خوراڪ رات جي وقت ڪوسو

۴— ميلن فوڊ (خوراڪ) اَن جي مٿيان نه ڪلي اُهو وري ان منجهه (اسٽارچ) يعني کلڻ سي ٺهيل آهي

۵— ميلن فوڊ (خوراڪ) منجها ميٺاڻ جي کنڊ سي بہ نه ٺهلي آهي

۶— ميلن فوڊ (خوراڪ) ڪڻڪ اناج جي داڻن کي جهڙو ڪچائي طور سي نه بنائي آهي

۷— ميلن فوڊ (خوراڪ) موجب اصول علم جي وري ليبگ جي طريقه هشياري سي چڱا جڙ وري ڪمون جي اٿي جي ٺهلي آهي

۸— ميلن فوڊ (خوراڪ) پاڻي منجهه وڃڻ سي ڪري رنجهي ٿي وري ان منجهه بعد سي وري ڪاٺي تسم جي ثقيل مادو نه آهي

۹— ميلن جي ٺهلي لي خوراڪ جي ملاوت منجهه تندرست مارڻن جي جسم منجهه جن حالت منجهه هضم ٿهلي تي انهم حالت رکهين آن خوراڪ جي داڻ منجهه جهڙ اهاردار مادي اهين آن منجهه پهڙ فارني وبو آهي

۱۰— ميلن فوڊ (خوراڪ) ڇڪڻ کي وري توانا ان طرح مريض کو ڪم قوت مارو جهڙي جونڊو آن جهڙي حڪم سان هدايات مذڪور جي تيار ڪري سگهون ٿا

۱۱— ميلن فوڊ (خوراڪ) منجهه اتلا کهيرا (ڪهار) جي خاصيت ٿهڻ جي باعث وهي ناتوان مارڻن کي جي معدو کي ستني وري تا هضمي کم ڪري ٿي

۱۲— ميلن فوڊ (خوراڪ) ڪم قوت مارڻن وري ننڍي ٻچن لاءِ کار خير جي هاضمه کي ودا ري ڪندڙ آهي

۱۳— ميلن فوڊ (خوراڪ) جي مان جو کير ور ڏيڻو وري وداري فائدو بخشندڙ آهي

۱۴— ميلن فوڊ (خوراڪ) کي ميڪري وقت منجهه مان جي کير جي بدرو ڏئي سگهون ٿا وري اِن سي مان جو کير ڇهڏان لاءِ گهڻو آسان آهي

ميلن جي ٺهلي لي خوراڪ وا پرن جي نسبت فهمايش

۱— ٻري مهيني جي اندر عمر جي کير پيئڻ واري نازڪ مزاج ٻچن لاءِ آهي

۱— پاؤ پيسه (کير پيئڻ کي اد نالي) پاڻي جي ڪجهي آن منجها ميڪرو ڇنجهر بهري ننڍي رکائي منجهه وجهي

۲— ۽ وري اد وڏو چمچو ميلن فوڊ منجهه وجهي ۽ وري تموزي ٿاڻي ملهه رکهي هري هري پائين ڪجهي ۽ بي پلاه پلاه پاڻي منجهه ملائيجي

۳— وري پوره پاؤ پيسه (کير پيئڻ جي بائلي بهري آٽرو) ٽاؤ کير ٿا جو ۽ وري باقي تهو ڏلڻ پاڻي آن منجهه وجهي ڏيڻي تهورو ڪوسو ڪري

۴— ٻري مهيني کنا وٺي عمر جي ٻچن لاءِ

۱— ميڪرو ڏڍ چمچو بهري ميلن فوڊ ڪڻجي ۽ ڏين جهڙو اڌا چمو آن جهڙا چار چمچا پاڻي منجهه

"27A, Sloane Street.

"Mrs. A. Stoecker encloses a photo of her little girl who was fed entirely on Mellin's Food for more than a year, and she has never had an illness."

SINDHI.

مي ٻچن ۽ ٻمارن لاءِ ـ ـان جي ٺهڍي آه خوراڪ

هيٺ لکي جي موافق خوراڪ ٻاري
ودرمو خير جي ڳا خير ٻاڪي منجهه
ملان سي عان جي خير جهڙو مارو تهلي تو
پو ناطاقت مارونن وڏي خير ٻين وآڌي
ٻچن کي مي گهڻي ساري خوراڪ آه آن طرح
وڏا حڪما نامي ٿين ان خوراڪ جي تعريف
ڪئي آه

ڪوسي يا مرطوب وأوزسي سي نه ٿيندو
نقصانا اوڙ ٿي خوراڪ آه جي ميڪڙو
سرڪها بوهو اناج جو عرق آه تنڌ ٻاري منجهه
ويڄن سي ڳري ويڄي ڙوان منجهه ڪيڙا
ماالڪل صانه اهين

ميلن جي ڳهڻي لي خوراڪ ٻچن کي وڏي ناتوان مارونن لاءِ ڪني ساري آه من دانت آه

١— ميلن فوڊ (خوراڪ) خير منجهه ملان سي هي ڪيڻه قدرتي خوراڪ جي جيهرو ٿندو وڏي تمام انگرنکي قوت بخشيندو ۽ وڏي پرورش لاءِ ٻي جيڪي اجزا ضرور اهين سي ان منجهه سب ڪي موجود اهين

٢— ميلن فوڊ (خوراڪ) منجهه جيڪي اجزا اهين سي ان طرح اهن جي فوراً خون جيڙي سي ملن ٿا

٣— ميلن فوڊ (خوراڪ) فوائدي ڪيمياڻي ۽ وڏي علم موجوداه سي درست قانون منجها برابر تيار ڪئي آه

جان تیانر — ایم۔ ڈي

مسٹر برائي پي ایم۔ ڈي ایف آر سي ایس کلنیکل سرجري اور یونیورسیٹي کالیج هسپتال کا مدرس اور یونیورسیٹي کالیج ہاسپٹل کے سرجن کي طرف سے

۵۵ ومپول اسٹریٹ — تاریخ ۱۷ ڈیسمبر ۱۸۷۰ ع

کئي بار ایسا ہوا ہے کہ جن بچون کو کسي قسم کي خوراک هضم نہین ہوتي تهي اونکو تمهاري خوراک دیکے مین نے اونکي جان بچائي ہے اور ایسا ایک وقت بهي اتفاق نہین ہوا کہ تمهارا عرق لوکے جو خوراک بنائي وہ مریض کو موافق نہ پڑي اور یہہ بات ہمیشہ پایہ ثبوت کو پہنچي ہے کہ بچون کے لئے یہہ خوراک مقوي اور ہاضم ہے

مین جانتا ہون کہ تمهاري تیار کردہ خوراک جسوقت حکیمون اور عام لوگون مین مشہور ہوجائیگي اوسوقت تمکو اوسکے زیادہ خرچ اور بکار کي امید واثق ہوجائیگي

برکلي هل ایف آر سي ایس

(درست نقل)

مسرس کیمپ اور کمپني گماشتۂ ہندوستان۔ اودیپور ۱۲ فیبروري سنہ ۱۸۷۲ ع

صاحبان من — مہرباني فرماکے دو ڈزن بوتل میان کي بنائي ہوئي بچون کي خوراک کي میرے نام بروانہ کرو اوسي قسم کي جیسي آپ نے آگے بھیجي تهین — معرفت برولسن اور کمپني احمد آباد اتهنا

اس خوراک کي جتني تعریف کرون تهوڑي ہے کیونکہ مجهے یقین ہے کہ اس سے میرے بچے کي جان بچي ہے گذشتہ مہینے مین قریب تین ہفتون تک ہمارے پاس اسٹیشن کي خوراک بلکل نہ تهي اس سبب اول کے موافق بچے کو بدهضمي ہونے لگي پھر سے یہہ خوراک مین اوسکو دینے لگا اور دو ہي دن کے عرصہ مین پھر وہ پہلے کے جیسي تندرست ہوگئي

الحال یہہ خوراک مین ایک مریض کو جسکي عمر ۵۶ برس کي ہے دیتا ہون یہہ مریض بہت بیمار تها اور اپنا علاج کرنے کے لئے مجهے بلایا قبل اسکے پندرہ روز تک کسي قسم کي خوراک اوسے هضم نہین ہوتي تهي جس دن سے مین نے یہہ خوراک اوسے دیني شروع کي اوس دن سے اوسے شکایت سوء هضمي کي نہین ہوئي اور بہت کرکے مجهے بهروسا ہے کہ اسي سے اوسکو صحت ہوگي وہ قوم کا جین ہے اسلئے گوشت کا شوربا کہا نہین سکتا اور ایسي حالتون مین تمهاري بنائي ہوئي خوراک گویا ایک نہایت قیمتي اله ہے میرے علاج خانہ کے لئے

اس عجائب خوراک کي شہرت آج کل جتني هندوستان مین ہونا چاہئے اوتني نہین ہوئي ہے یہہ سمجهکر جوکچهہ مین نے تحریر کیا ہے اوسکا استعمال تم اپني مرضي کے موافق کرسکتے ہو

مین آپکا محب صادق

مسٹر آر ڈبلو کننگهم ایم ڈي — سرجن

کیاٹرہام والي سرري — اپریل ۲۴ سنہ ۱۸۷۸ ع

بعض میرے بچون اور دوسرے کمسن مریضون نے جنکو تمهاري خوراک کهانے کي مین نے سفارش کي تهي اون پر اوسنے کیا تاثیر کي وہ سب مین نے باریک بیني سے زیر نظر کي اور مین اس بات کو نہایت خوشي سے لکهتا ہون کہ جسوقت مان کا دودهہ میسر نہین ہوتا ہے اوسوقت تمهاري بنائي ہوئي خوراک مان کے دودهہ کے عوض مین ایک عمدہ شي ہے اور مین جانتا ہون کہ تمام مصنوعي خوراک سے بہتر ہے

جبکہ وہ برابر احتیاط سے دیجاتي ہے تب مین نے بارہا دیکها ہے کہ طبیعت کو موافق پڑتي ہے اور اوس سے فوراً گوشت کو طاقت و توانائي ہوتي ہے

یہہ گرم پاني مین بالکل مخلوط ہوجاتي ہے جس سے بچے کي خوراک تیار کرنیکا کام بہ آساني اور فوراً انجام پاتا ہے علاوہ اسکے جس آٹے سے کہ خوراک بنائي گئي ہے اسمین کے "اسٹارچ" (اہاردار مادے) بہ سہولت هضم ہوسکین اسطرح اسکو بہ صورت شکر متبدل کیا ہے اور جس چیز کو بچہ هضم کرنہین سکتا ہے اور جس سے اوسکي طاقت بدني کو نقصان ہوتا ہے ایسي چیز کو هضم کرنے مین اوسکو محنت کم پڑتي ہے

جن بچون کو ماتهہ پر بهي بغیر مان کے پرورش کرنا ہے اونکو یہہ خوراک دینے کے لئے مین بہ تاکید اور مضبوط سفارش کرتا ہون اور مجهے یقین ہے کہ جس خوراک کے فایدے بتدریج ظاهر ہوتے ہین اوسکا خرچ بہت ہي زیادہ ہوجائیگا اور میري رای کے مطابق ایسا ہي ہونا چاہئے

۳— جسوقت خوراک ناموافق پڑے اوسوقت دودھ میں یا خوراک تیار کرنے یا خوراک دینے کے طریقہ میں کسی نوع کی بھول ہوتی ہی یا ایک وقت میں بہت سی خوراک دینے میں آتی ہی یا باربار دیگئی ہی یہہ سبب نقص دودھ پینے کی بوتل کی ناصفائی کے باعث وقوع میں آئے ہیں اس امر کی نسبت ماں اور دائی کو اپنی تشفی کرنا چاہئے— بدقسمتی سے یہہ آخری خطا اکثر ہوا کرتی ہی خصوصاً جہانکہ خوراک تیار کرنیکا کام بکقلم نوکرون کے ہاتھہ میں ہوتا ہی یہہ سچ ہی کہ بچون کو اکثر بیماریان اسی سبب سے ہوا کرتی ہیں

پہلے تھوڑے وقت تک خوراک کے دینے سے دست پتلے ہوتے ہیں تو ایسا نہیں سمجھنا کہ بچے کو مروڑا ہوا یا اوس سے گھبرانا نہیں کیونکہ پہلے بچہ کا دست پتلا ہی ہونا چاہئے اور ایک یا دو دن میں پھر وہ بدستور ہو جاتا ہی

کی بار ایسا ہوا ہی کہ یہہ خوراک کھانیکے بعد بچے کو سخت دست ہوتے ہیں اور اوسمین سے بدبو آتی ہی یہہ واقعہ اوسوقت ہوتا ہی کہ جسوقت بچہ کو نامناسب خوراک دیجاتی ہی جو انتریون کے اندر بھری رہتی ہی اور بوسیدہ ہوکے خوراک کے ساتھہ خارج ہوجاتی ہی اگر یہی بات رہی تو ہوشیاری سے دودھ پرکی تری اوتار لینا اور خوراک میں استعمال کرنے کے پیشتر بہت سا پانی ڈالکے پتلا کرنا

اکثر لوگون کا یہہ خیال ہی کہ جاڑی خوراک بہت مقوی ہوتی ہی یہہ بات غلط ہی ماں کا دودھ بالکل پتلا ہوتا ہی لیکن حالت تندرستی میں عمدہ خوراک ہی— جاڑی شی بالکل ہضم نہیں ہوتی اور طاقت آور بھی نہیں اس لئے میلن کی بنائی ہوئی خوراک میں ایک یہہ فایدہ ہی کہ جب گھول جاتی ہی تب نہایت مقوی رقیق شی بنجاتی ہی جو ماں کے دودھ کے جیسی پتلی ہوتی ہی

۴— ناتوان آدمیون اور جو ماں اپنے بچہ کو دودھ پلاتی ہیں ان کے لئے ہدایات

۱— ایک بڑا چمچا ملیب یا زیادہ میلن فوڈ لینا اور بڑے چمچے گرم پانی میں اوسکو مخلوط کرنا

۲— پھر ایک پیالہ بھر گائی کا ٹھنڈا دودھ اوسمین ملانا— اتنی خوراک یا اس سے زیادہ جتنی چاہئے دن بھر میں کئی بار کرکے کھانا— میلن کی بنائی ہوئی خوراک کے ساتھہ دودھ ملائے پیا تو جلد ہضم ہوتا ہی بہ نسبت تنہا دینے کے مگر اسطرح استعمال کرے پربھی ناموافق پڑے تب اوسمین زیادہ پانی ڈالکے پتلا کرنا یا فقط پانی ہی میں میلن کی خوراک کو گھلانا

جو ماں اپنے بچون کو دودھ پلاتی ہی اونکے لئے میلن کی بنائی ہوئی خوراک ایک بڑی نعمت ہوگی خصوصاً اوس حالت میں کہ وہ اپنی معمولی خوراک جتنی چاہئے اوتنی کھا نہیں سکتے ہیں— کافی خوراک کے کھانے سے اونکا دودھ بڑھتا اور زیادہ فایدہ بخش ہوتا ہی

شفارش نامہ

بلجین کے بادشاہ کے مشہور ڈاکٹر ایوسٹس اسمتھ کی طرف سے

۵ چارج اسٹریٹ ہانوور اسکوایر— تاریخ ۱۷ مئی ۱۸۷۰ء

جو خوراک تم بچون کے لئے بناتی ہی وہ دوسری تمام خوراکون سے جن سے میں واقف ہون اتنا دودھ کی عمدہ ہی اور یہہ خوراک بچے خواہ تندرست خواہ مریض ہون دونون کے طبیعت کے موافق ہی اور بہت کرکے نہایت کم سن بچے کے لئے ثقیل نہیں ہی جس خوراک میں یہہ تمام باتیں ہون اوسکی زیادہ تعریف کرنا ضرور نہیں اور مجھے یقین کامل ہی کہ آجکل اسکی زیادہ خواہش اور خرچ ہی

ایوسٹس اسمتھ ایم ڈی

فیرنگڈن جنرل اور خیراتی شفاخانہ کے دایہ گری کا حکیم جنوبی لنڈن کے شاہی شفاخانہ کا ماضی طبیب اور پارس مالگرابن کے قیدخانہ کا ڈیپوٹی میڈیکل آفسر جان تیانر ایم ڈی کی طرف سے

الفرید ہوس ۱۱۸ نیورنگٹن کازوے سوتھہ ایسٹ— ۱۶ جانیواری ۱۸۶۱ ع

جو خوراک دوسرے لوگون نے بچون کے لئے بنائی ہی اونکے ساتھہ تمہاری تیار کردہ خوراک کا مقابلہ کیا تو میری کامل تشفی ہوئی کہ بچون کے بدن میں جلدی سے طاقت و توانائی پیدا ہو ایسے عمدہ خواص و طاقت بخش تاثیرات تمہاری تیار کردہ غذا میں ہیں دوسرون کی خوراک میں نہیں لہذا میں ہمیشہ اسکو دوسری ہرقسم کی خوراک پر ترجیح دیتا ہون

۴۰ — تین مہینے سے زیادہ عمروالے بچون کے لئے

۱ - ایک بڑا چمچا بھرے میلن فوڈ لینا اور حسب مذکور بالا اوسکو چار بڑے چمچے پانی مین مخلوط کرنا

۲ — پھر آدھا پینٹ بھرے اتنا کائي کا تازہ دودھ اوسمین ڈالنا اوربقدر ضرورت گرم کرنا

۳ — والدؤن کے لئے مفید مطلب آگاہي

۱ — خوراک کتني چاہئے — ہدایات مذکور مین جومقدار بتلائي ہي وہ دودھ پینے کي بوتل بھرنیکے لئے بس ہي اور اوتني خوراک تین چار مہینے کے طفل کے ایک وقت کے کھانے کے لئے کافي ہوگي اگر وہ تمام خوراک بچہ ایک وقت مین کھا نہ سکے تو باقي ماندہ کو پھینک دینا کیونکہ باردیگر گرم کرنیسے کھٹي ہوجاتي ہي اور کھانیکے قابل نہین رہتي — اوس خوراک کو دودھ پینے کي بوتل مین بھرنا اور وہ پوري ہونے تک بچہ کو پینے دینا اگر قبل اسکے وہ سیر ہوگیا تو زیادہ کھانیکے لئے جبر نہین کرنا — زیادہ خوراک کھانیمین بچہ آنا کاني کرے تو سمجھنا کہ بقدر حاجت اوسنے کھا لي ہي — جسوقت بوتل کي خوراک پوري ہوجاوے تب فوراً اوسکو ہٹا دینا خالي بوتل چوسنے سے بچون کو نقصان ہوتاہي کیونکہ اوسکے ذریعہ سے اونکے پیٹ مین ہوا بھرجاتي ہي جس سے اونکو اخیر کو بہت بے آرامي ہوتي ہي

۲ — دودھ کسطرح استعمال کرنا — یہہ نہایت ضروري ہي کہ خوراک تیار کرنیمین جو دودھ استعمال کیا جاتا ہي اوسکو جتنا گرم کرنا ضروري ہي اوس سے زیادہ نہین کرنا زیادہ گرم کرنیسے ثقیل ہوجاتا ہي لہذا ہشیاري رکھنا چاہئے کہ دودہ از حد گرم نہ ہونے پاوے — گرمي کي موسم مین اوسکو سرد جگہہ مین رکھنا یا تازے دودھ مین ایک چٹکي بھر بائي کاربونیٹ آف پوٹاش ڈالکے چند ثانیہ تک ہلانا بعد اسکے خوراک بھري ہوئي بوتل کو سرد پاني سے بھرے ہوئے برتن مین ڈوبانا — اگر دودھ گاڑھا ہي اور بچہ سے سوء ہضمي کے آثار ہویدا ہي اوس حالت مین اوسپرکي تھوڑي سي تري اوتار لینا — بعضے وقت طفل اپني اصلي خوراک کھانے سے بھي بیمار ہوجاتے ہین — اگر بچہ کي قی مین کھٹي بو آوے تو خوراک دیتے وقت ہرایک بوتل مین بائي کاربونیٹ آف پوٹاش ایک چٹکي بھر ڈالنا اور جب تک کائي کا تازہ دودھ مل سکے تب تک کسي قسم کا منجمد دودھ استعمال نہین کرنا اگر منجمد دودھ ہي پلانا پڑے تو جو دودھ بغیر شکر کے تیار کیا ہي وہ استعمال کرنا کہ شکر کي زیادتي سے بچنے کے لئے بہتر ہي

۳ — خوراک کتني گرم چاہئے — خوراک بہت سرد دینا نہ چاہئے کیونکہ بچے اوسکو پسند نہین کرتے اور اونکے لئے مفید بھي نہین ہي — خوراک دینے کے قبل ماں نے یا دائي نے تھوڑا چکھ دیکھنا اگر گرم ہی لیکن منہہ کو تسکین بخش ہي تو سمجھنا کہ جتنا گرم چاہئے اوتنا گرم ہي اگر بہ سبب تاخیر یا ملاوٹ مین خطا ہوجانے سے بہت ٹھنڈا ہوجاوے تب وہ جس برتن یا دودھ پینے کی بوتل مین ہو اوسکو گرم پاني سے بھرے ہوئے بڑے برتن مین چند دقیقہ رکھکے گرم کرنا — خوراک رات کے وقت گرم نہین رکھنا اگر رات کے وقت بچہ کو کھلانا منظور ہي تو جتني ضرور ہو اوتني سرد تیار کرنا اور کھلانیکے قبل بقدر ضرورت گرم کرلینا

۴ — دودھ پینے کي بوتل اور نلي احتیاط سے صاف رکھنا — ہر وقت کے کھانے کے بعد اونکو برش سے صاف کرنا اور دھو ڈالنا اور باردیگر کام مین لانے تک اوسکو سرد پاني مین رکھنا چاہئے — دو بوتل رکھنا بہتر ہی تا کہ باري باري سے استعمال کي جاوین

۵ — بچون کي خلقي خاصیتون کے موافق اوسکو کم زیادہ خوراک دینا چاہئے — کتنے ایک بچے تندرست توانا اور قوي الجسم ہوتے ہین اور بعضے مریض ناتوان اور کم قوت لہذا ہرایک کو خوراک ایک ہی مقدار کي دینا غیرممکن ہي — کتنے ایک بچون کو جوانون کے مانند دوسرون کي بہ نسبت دوگني خوراک چاہئے اس لئے ماں اور دائي کولازم ہی کہ اپني دانائي اور عقل کی رسائي سے خوراک تیار کرین اور کھلاوین اول دو یا تین مہینون تک خوراک اوسط درجہ کي دینا مگر بار بار اور اتني عمر کے بچہ کو دو دو گھنٹے بعد چھہ یا آٹھہ بڑے چمچے بھر دینا کافي ہي اور جب بچہ بڑا ہوتا جاوے خوراک بتدریج بڑھاتے جانا اگرایک وقت کي اوتني خوراک کھلانے بعد بچہ کا پیٹ نہ بھرے تب اور تھوڑي خوراک لیکے اوسیقدر پاني اوسمین ملانا او دودھ پلانا ہو تو پاني ڈالکے پلانا اگر بچہ کو خوراک ثقیل معلوم پڑے تو ہدایت مین بتلائي ہوئي خوراک کي مقدار سے تھوڑي کم لینا اور دودھ مین اور زیادہ پاني ڈالکے اوسکو کھلانا — خوراک پاني اور دودھ ہرایک طفل کے لئے کتنا لینا یہہ سب باتین باریک بیني اور بار بار کي تجربہ کاري سے دریافت ہوتین

URDU OR HINDOSTANI.

بچون اور ناتوان لوگون کے لئے میلن کي بنائي ہوئي خوراک

نیچے کي بموجب یہہ خوراک پاني ڈالے ہوئے آٹے کے بدلے دودھ مین ملانے سے مان کے دودھ جیسي عمدہ ہوجاتي ہي اور ناتوان لوگون اور شیرخوار بچون کے لئے یہہ عمدہ خوراک ہي ایسا بڑے بڑے نامي اطباؤن نے سکي تعریف کي ہي

گرم یا مرطوب ہوا سے نہ بگڑ جاوے وہ یہي خوراک ہي کیونکہ یہہ ایک سوکہا ہوا اناج کا عرق ہي جو پاني مین ڈالنے سے حل ہوجاتا ہي اسمین بالکل باریک کیڑے نہین

میلن کي بنائي ہوئي خوراک بچون اور ناتوان لوگون کے لئے کیون عمدہ ہي اس بابت

۱—میلن فوڈ (خوراک) دودھ مین ملالین تو وہ بعینہ قدرتي خوراک کے مانند مکمل خوراک بنجاتي ہي اور تمام بدن کي تقویت اور پرورش کے لئے جو جو اجزا ضرور ہین وہ سب اسمین موجود ہین

۲—میلن فوڈ (خوراک) مین جو اجزا ہین وہ اسطورسے ہین کہ فوراً خون کي زندہ دھار سے ملجاتے ہین

۳—میلن فوڈ (خوراک) قواعد کیمیائي اورعلم موجودات کے درست قانون بموجب برابر تیار کي گئي ہي

۴—میلن فوڈ آٹے کي بني ہوئي نہین ہي اور اسمین اسٹارچ یعنے کلپ بھي نہین ہي

۵—میلن فوڈ (خوراک) مین گنے کي شکر نہین ہي

۶—میلن فوڈ (خوراک) اناج کے کچے دانون کو کچلکر خام طور سے بنائي نہین ہي

۷—میلن فوڈ (خوراک) بموجب اصول علم اور لیبگ کے طریقہ موافق ہوشیاري سے عمدہ جو اور گیہون کے آٹے کي بنائي ہوئي ہي

۸—میلن فوڈ (خوراک) پاني مین ڈالنے سے گھل جاتي ہي اور اسمین بھوسي اورکسي قسم کا ثقیل مادہ نہین ہي

۹—میلن کي بنائي ہوئي خوراک کي بناوٹ مین تندرست آدمي کے بدن مین "اسٹارچ" یا ابادار اشیا س حالت مین هضم ہوتے ہین ویسي حالت رکھنے سے اس خوراک کے دانون مین جو اباردار مادے ہین اسمین پھیرپھار ہوگیا ہي

۱۰—میلن فوڈ (خوراک) تندرست اور توانا اسیطرح مریض و کم قوت آدمي کو جیسي چاہئے اس موجب بموجب ہدایات مذکور تیار کي جا سکتي ہي

۱۱—میلن فوڈ (خوراک) مین الکالائین (کہار) کي خاصیت ہونے کے باعث وہ ناتوان لوگون کے معدہ کي کھٹي اور بدھضمي کم کرتي ہي

۱۲—میلن فوڈ (خوراک) کم قوت آدمي اور چھوٹے بچون کے لئے گائي کے دودھ کے ہاضمہ کو زیادہ کرتي ہي

۱۳—میلن فوڈ (خوراک) سے مان کا دودھ بڑھتا اور زیادہ فایدہ بخش ہوتا ہي

۱۴—میلن فوڈ (خوراک) کو ایک ہي وقت مین مان کے دودھ کے ساتھ دے سکتے ہین اور اوس سے مان کا دودھ بہ آساني چھوٹ جاتا ہي

میلن کي بنائي ہوئي خوراک استعمال کرنے کے نسبت فہمایش

۳—تین مہینے کے اندر عمر کے شیرخوار اور نازک مزاج بچون کے لئے

۱—پاو پینٹ (دودھ پینے کي آدھي بوتل) پاني لینا اوسمین سے ایک بڑا چمچا لیکر چھوٹي رکابي مین ڈالنا

۲—پھر آدھا بڑا چمچا میلن فوڈ اوسمین ڈالنا اور دھیمي آنچ پر رکھکے پکا کے پاني مین ملا دینا

۳—بعد اسکے پاو پینٹ (دودھ پینے کي بوتل بھرسے اتنا) گائي کا تازہ دودھ اور باقي رہا ہوا پاني اوسمین شامل کرکے بقدر ضرورت گرم کرنا

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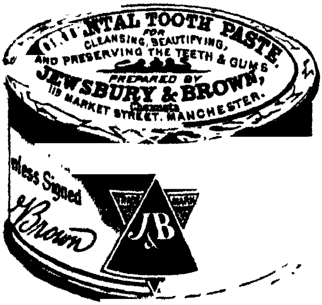
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CAUTION.—Ask for "JEWSBURY & BROWN'S ORIENTAL TOOTH PASTE." Numerous imitations, adopting the title, are offered. Observe the Trade Mark (a double triangle) and the autograph signature of JEWSBURY & BROWN, MANCHESTER, on each pot. WITHOUT THESE NONE ARE GENUINE.

Sold universally by Perfumers, Chemists, &c.

"JUST THE SOAP FOR YOUR BATH!"

Ivy soap

IT FLOATS!

Is it not most annoying when having a bath to lose the soap or to find you have left it wasting in the water? Neither will happen with "IVY" Soap, which is always in sight, floating on the surface.

"IVY" Soap is a beautiful, white, "Milky" Soap, hard and very lasting. Gives a creamy lather, and is SPLENDID FOR WASHING Laces, Prints, Fine Underclothing, and all delicate goods, the colour and texture of which suffer damage from common Soaps.

G. W. GOODWIN & SON, MANCHESTER.

BORWICK'S BAKING POWDER.

THE BEST THAT MONEY CAN BUY.

Perfectly Pure and Free from Alum.

In HALF-A-MINUTE you can make a pure, bright, DELICIOUS JELLY with boiling water and a packet of

MOIR'S TABLE JELLY POWDER. (Patented)

What do you think of this? Made in half-a-minute by the mere addition of boiling

ALWAYS TURNS OUT WELL.

No Sediment. Never Fails.

Will keep for years in any Climate.

SOLD IN TEN FLAVOURS (Orange, Lemon, Vanilla, Almond, Calfsfoot, &c.) by Grocers and Stores everywhere.

REFUSE ALL SUBSTITUTES.

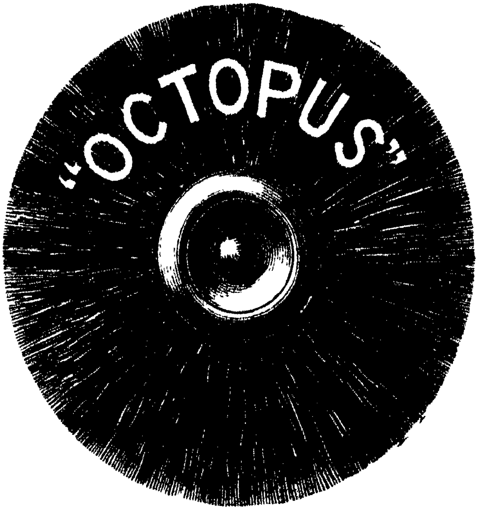
The genuine bears the name and address of the original Patentees and Manufacturers on every Packet.

"JOHN MOIR & SON, LIMITED," 148, Leadenhall St., London.

THE PATENT

'Octopus'

Anti-Incrustator



AUTOMATICALLY COLLECTS the "FUR" in Kettles, Kitchen Boilers, and Pipes.

Placed in the kettle, it is most interesting and instructive to watch the development of the "Octopus" week by week, until at the end of, say, twelve months, it resembles a block of coral, and becomes an unimpeachable witness of its usefulness.

Sherborne House, Northleach, Glos., June 5th, 1894.

LORD SHERBORNE wishes to have two Anti-Incrustators to put in a high-pressure kitchen boiler. Those he has in use have proved of great service.

Carrigoran, Newmarket-on-Fergus, Co. Clare, 13th Aug., 1894.

LADY FITZGERALD encloses a Postal Order for 15/-. She finds the "Octopus" most useful, both for boiler and kettles.

Can be obtained in several sizes to suit the smallest or largest kettle or boiler.

PATENTEES AND SOLE MANUFACTURERS:

LANGSTAFFE, BANKS & PECKOVER,

19 and 21, Bury St., Gt. Russell St., London, England.

With VENUS SOAP for your Helpmate you will save Rubbing, have Clothes Whiter, and Home Brighter.

DIRT REMOVED QUICKLY AND NO CHAPPED HANDS.

NOT
A RUB IN THE TUB
V NI
SOAP DOES
THE WORK-
NOT YOU

BONUS For particulars of the Bonus Scheme, by which each purchaser gets a Prize, see VENUS SOAP wrappers. BONUS

GREY HAIRS ARE HONOURABLE,

SO ARE THE

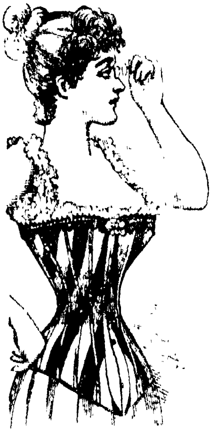
"IMMOVABLE SCALPETTES."

Made only of Natural Grey Hair,
Impossible of Detection.
to Match, or from Ladies' Own Hair.

HAIR COMBINGS DISENTANGLED AND MADE UP.

T. S. BROWN,
3, LEECE STREET (top of Bold St.), LIVERPOOL.

EXQUISITE MODELS. PERFECT FIT. GUARANTEED WEAR.



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DIAGONAL SEAM CORSETS.

Patented in England and on the Continent. W seams nor te r in the fabric.

Made in White, Black, and all the Fashionable rs and Shades, in n Cloth, Satin, and l; also in the new ary Woollen Cloth.

"Admirably delled exquisitely neat and strong."—*Que* ...

THREE GOLD

CAUTION.—Beware of worthless Imitations. Every genuine Y & N Corset is stamped "Y & N Patent Diagonal Seam, No. 116," in oval on the inside lining.

SOLD BY THE PRINCIPAL DRAPERS AND LADIES' OUTFITTERS IN THE UNITED KINGDOM AND COLONIES.

"Strongest and Best."—*Health.*

FRY'S

PURE CONCENTRATED

COCOA.

"There is no beverage which can so confidently be recommended."—

Medical Annual.

Try also

FRY'S CEYLON CHOCOLATE,

FRY'S CARACAS CHOCOLATE,

and the various other

COMPOSITIONS CHOCOLATEES

of this Firm.

HIGHEST HONOURS, CHICAGO, 1893.

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90 PRIZE MEDALS AWARDED TO THE FIRM.

JOHNSTON'S
CORN FLOUR

"Is decidedly superior."—*The Lancet.*

The Best Quality is supplied in Family Tins, 1-lb. and 3-lb.; also Packets, 2, 4, 8, and 16-oz.

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BOURNE
TABLE
WATERS

In Pints and Quarts,
Carriage Paid.

For Price, apply to

R. M. MILLS & CO.,
Manufacturers,
BOURNE.

AFFECTIONS
OF THE
EYES AND EYELIDS.

DR. CHAMBERLAIN'S
OPHTHALMIC OINTMENT.

PRESCRIBED BY PHYSICIANS AND OCULISTS OF THE HIGHEST STANDING.

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LUDGATE CIRCUS, LONDON, E.C.

By the Authority of Her Majesty the Queen,
Empress of India, under the Great Seal.

BORAX DRY SOAP "IS THE BEST"

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"The Queen's Patent for Excellence." Highest Award in the World. In Quarter, Half, and Pound Packets. Full Directions on each.

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"The Great Dirt Extractor."

"Perfection of Packet Soap." Extracts all Dirt Immediately. Under Her Majesty's Royal Patent for Utility. In Quarter, Half, and Pound Packets. Full Directions on each.

Patent Borax Preparations are sold in convenient Packets ready for instant use at home, on board ship and on journey.

These are known throughout the civilized World by this Registered and Special Trade Mark.

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Breakfast, Dinner, Tea, Supper Services, Glasses, Dishes, Plates, Spoons, Knives, and all other domestic things, made Clean, Sweet, Bright, Beautiful by Patent Borax Preparations.

"Linen White as Snow. Woollen, Soft as New-mown Hay."

PREPARED 'CALIFORNIAN' BORAX

"THE HOUSEHOLD TREASURE PURE ANTISEPTIC."

Specially prepared for Personal and Domestic Uses. Marvellous Purifier, Water Softener, Dirt Expeller, Taint Remover, Food Preserver, and Arrester of Decay. In Packets. Receipts for Household and Toilet on each.

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Patent Borax is sold in Packets, by all Grocers, Starch and Soap Dealers.

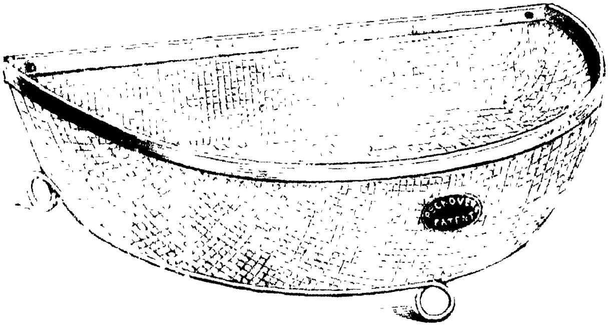
No place so **DANGEROUS**
as the Kitchen Sink!

BUT the Patent

"SANITARY"

SINK BASKET,

Which stands in the Corner of Kitchen Sink, retains all Solid Matter from Dirty Water thrown into it, and keeps Waste Pipe always Clean.



PREVENTS BAD ODOURS.

SINK-FLOODING PREVENTED. SINKS ALWAYS CLEAN.

"Peveril House, Buxton, Feb. 13th, 1894.

"Miss Gretton is so pleased with the Sink Basket that she will be much obliged if Messrs. Langstaffe & Co. will send her another. Miss Gretton thinks the Sink Basket cannot be too highly spoken of, and she has already told many people about it."

Made in several sizes and shapes. Enamelled White on Iron or Brown on Copper, and Silver-Plated on Copper.

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MANUFACTURERS TO HER MAJESTY.

BROWN & POLSON'S

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World wide reputation

CORN FLOUR

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FOR HOME BAKING

BZP

BROWN & POLSON'S
PAISLEY FLOUR
(PATENTED)

BZP

REQUIRES NO YEAST OR BAKING POWDER

A new preparation—PURE & WHOLESOME—to be used with ordinary Flour for IMPROVING Scones, Cakes, Pastries, and Household Bread.

Makes Bread Digestible even when new.

In order to provide exactly for the Requirements, all Schools should be supplied with

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NATURA REMEDIA OMNIBUS PRAEBET
(OPHELIA CHIRATA)

CHIRATA LIQUIDA KEMP

(FOR DISPENSING),

A Purified and Standardized Solution of the Active Principles of

OPHELIA CHIRATA.

ALSO

CHIRATA TONIC KEMP,

A Diluted Form of the above for Patient's use.

Chirata Kemp in either of the above forms is an *incomparable tonic*, *febrifuge*, *anti-anæmic*, and *functional stimulant*. It is practically a new remedy in which the properties of **Chirata** are for the first time fully developed.

In constipation, intestinal worms, sluggish liver, and the train of disorders arising therefrom, **Chirata Kemp** is without equal. As a tonic and febrifuge it excels Quinine, and all similar remedies.

Chirata Liquida, 4-oz. bottles, 4s.
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OF ALL LONDON WHOLESALE CHEMISTS.

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"In the present day . [illegible] the nti [illegible] a matter of undoubted importance. Such [illegible] paration of great recuperative properties, called [illegible] *Liquida Kemp*, which is being daily more and more prescribed by our leading Physicians . [illegible] We have tried *Chirata Tonic* and can confidently recommen [illegible] pared at Mr. Kemp's laboratory, that gentleman's process is elaborately sci [illegible] that he does not shrink from any amount of trouble to present a valuable drug in its best form."—*Court Circular.*

Prepared only by

KEMP,

THE LABORATORY, 10, BEDFORD TERRACE,
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Unique Testimonial
from
H. I. M. The Empress of Germany.

Berlin, den 14 April 1893.

Dem Herrn Mellin wird auf seinen Wunsch bescheinigt, dass sein Kindernahrungsmittel "Food" bei den jungen Prinzen Söhnen Ihrer Majestäten des Kaisers und der Kaiserin mit bestem Erfolge angewendet worden ist.

Das Kabinet Ihrer Majestät der Kaiserin und Königin.

slation Berlin April 11th 1893

Mr Mellins request it is hereby certified that his "Food" for
ren has been used with the best results by the young Princes
s of their Imperial Majesties The Emperor and Empress
e Cabinet of Her Majesty The Empress & Queen

ellins Food Co. for India Lim. Pachi

जर्मनीकी राजेश्वरीके तरफसें,

एक अपूर्व प्रशंसा पत्र.

बर्लीन. अप्रिल १४. १८९३.

मि. मेलिनकी विनतीके उपरसें यह पत्र उनको प्रदान किया जाता हय के, उनकी बनाइ हुइ बालकोंके लियेकी खोराक जर्मनीके राज्याधिपति और राजेश्वरी के राजकुमारोंके उपयोगमें ली गइ हय, और यह परम लाभदायनी प्रतीत हुइ हय.

राजेश्वरीके दरबारकी मोहोर.

इस खोराकके नमुने मेशर्स एच. जे. रुस्तमजी कंपनी, कराची, ऑफिससें मिल सकेंगे.

Samples from Messrs. H. J. RUSTOMJEE & Co., Kurrachee; and from Messrs. LATHAM, ABERCROMBIE & Co., Bombay.

امپيريل مئجسٽي دي ايمپريس آو جرمني
(يعني جرمنيءَ جي مهاراڻيءَ)
وٽان مليل هڪ تمام سٺو سرٽيفڪيٽ

برلن - ۱۴ اپريل ۸۹۳

مسٽر ميلنس جي عرض پٺاندڙ هي سرٽيفڪيٽ
ڏجي ٿو تہ هن صاحب ٻارن لاءِ جو کاڌو ڏنيو آهي
ننڍن شهزادن يعني شهنشاهہ ۽ مهاراڻيءَ جي ٻارن
آندو آهي ۽ انهيءَ مان هننکي تمام گهڻو فائدو پهتو آ

جرمنيءَ جي مهاراڻيءَ جي دربار جي مهر.

هن کاڌي جا نمونا ميسرس ايڇ - جي - رستمجي
ڪمپني ڪراچي واري وٽان ملي سگهندا -

- *from Messrs. H. J. RUSTOMJEE & Co., Kurrachee; and from Messrs. LATHAM, ABERCROMBIE & Co., Bombay.*

એક અમુલય ખાત્રી પત્ર.

જરમનીની શાહનશાહબાનુ તરફથી.

શેહેર બરલીન, એપરેલની તા૦ ૧૪મી સને ૧૮૯૩.

મી૦ મેલીનની માંગણી ઉપરથી આએ ખાતરી પત્ર તેને આપવામાં આવે છે કે, તેણે બનાવેલો બચ્ચાંઓ માટેનો ખોરાક શાહનશાહ અને શાહનશાહબાનુંનાં નાહાના શાહજાદાઓનાં ઉપયોગમાં લેવામાં આવેલો છે, અને જેથી તેમને અતીશય ફાયદો પોંહોચ્યો છે.

શાહનશાહબાનું અને મહારાણીનાં દરબારની મોહોર.

આ ખોરાકના નમુના મેશરસ એચ. જે. રૂસતમજી કુ૦ની કરાંચી ઓફીસમાંથી મલશે.

Samples from Messrs. H. J. RUSTOMJEE & Co., Kurrachee; and from Messrs. LATHAM, ABERCROMBIE & Co., Bombay.

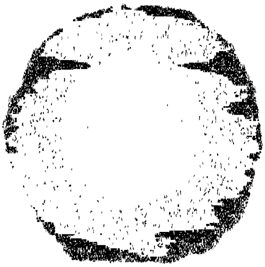
ايک بي نظير سند نامہ

شہنشاہ بانون جرمن کي طرف سي

برلن مورخہ ۱۴ اپريل سنہ ۱۸۹۳ع

مسٹر مانس صاحب کي درخواست سي يہہ نامہ انکو ديا گيا هي کہ جو خوراک انہون نے بچّون واسطي بنايا هي وہ خوراک شہنشاہ اور شہنشاہ بانون شہزادون کو کهلايا گيا هي اور اس خوراک سي نہايت هي فائدہ پہونچتا هي

شہنشاہ بانون اور ملکہ کي دربار کي مہر



اس خوراک کا نمونہ مسٹرس ايچ - جي رستمجي کمپني کي آفس مين مل سکتا هي - کراچي

les from Messrs. H. J. RUSTOMJEE & Co., Kurrachee ; and from Messrs. LATHAM, ABERCROMBIE & Co., Bombay.

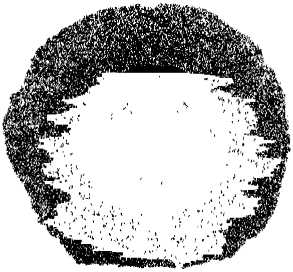
ஜெர்மானியர் தேசத்து மகாமாட்சிமை பொருந்திய
சக்கிரவர்த்தினியவர்களிடத்திற் பெற்ற
ஒப்பிட்டு சொல்லுதற்கு அறிய நற்சாட்சி பத்திரம்.

மொழிபெயர்ப்பு.

பொலின 1883௵ ஏப்ரல௴ 14௳

மெல்லின்ஸ் துரையவர்கள் கேட்டுக்கொண்டபடிக்கு அவரால குழந்தைகளுக்கு தயார்செய்து வரப்பட்ட உணவானது மகாமாட்சிமைதங்கிய சக்கிரவர்த்தியாராலும், சக்கிரவர்த்தினியாராலும், அவர்களுடைய குமாரர்களாகிய இளவரசர்களாலும் உபயோகப்படுத்தப்பட்டு, அதனால் அவர்கள விசேஷ குணங்கள் கண்டிருப்பதால் அவருக்கு இந்த நற்சாட்சிபத்திரம் கொடுக்கப்பட்டது.

இவ்வுணவு வேண்டியவர்கள் தென்கிழக்கா யிருக்கப்பட்ட பெக்காம் யென்கிற தேசத்தில் இருக்கும் மெல்லின்ஸ் உணவு யெந்திரசாலைக்கு யெழுதினால அவர்களுக்கு மாதிரியும் அனுப்பப்படும்.



மகாமாட்சிமை பொருந்திய அரசாணியுடையவும் பட்டத்து தேவியினுடையவும், மந்திராலோசனை சபை முத்திரையும் போடப்பட்டது.

Samples from Messrs. OAKES & Co., Madras
Mellin's Food Co , for India Lim., Peckham, London.